

### International

EASTERN GULF OF MEXICO SHRIMP CONSERVATION COMMISSION

#### FIRST MEETING HELD IN CUBA:

The United States-Cuba Commission for the Conservation of Shrimp in the Eastern Gulf of Mexico held its first meeting at Havana, Cuba, from June 30 to July 1, 1960. Donald L. McKernan, Director of the U.S. Bureau.of Commercial Fisheries, was elected chairman and Dra. Isabel Perez Farfante of Cuba was elected vice chairman.

The Commission agreed upon a coordinated research program that would meet its obligation under the Convention to maintain the maximum sustainable productivity of stocks of shrimp of common concern to Cuba and the United States in waters of the Gulf of Mexico off the coast of Cuba and the Florida coast of the United States. The scientific program is designed to provide information required for:

- 1. Identification of the stocks of common concern and the area they occupy.
- 2. Determination of the necessity for any conservation measures to assure the maximum sustainable yield, taking into account particularly the growth and death rates of shrimp in the area, the effect of the fishery on the stock, and the type of measure which would be most effective.
- 3. Determination of the effect of environment on the stocks.

It is expected that the program of the Commission will be inaugurated in the near future.

The next annual meeting of the Commission will be held in April 1961 at a place to be later determined.

Note: Also see Commercial Fisheries Review, May 1960, p. 45.

EUROPEAN ECONOMIC COMMUNITY

### TARIFFS ON FISHERY PRODUCTS ANNOUNCED:

The European Economic Community (Common Market) recently announced its Common Customs Tariff, This common

external tariff schedule is to supplant the individual national import tariffs of the six member-countries (the Netherlands, Belgium, Luxembourg, West Germany, France, and Italy). The tariff treatment proposed for fishery products is of particular concern because of the effect the changes in import treatment may have upon international trade in fish and fish products.

The duty rates proposed to be applied to imports of fishery products into the Common Market area are shown in the table. Duties on most fresh, frozen, or cured fish and shell-fish will range between 10 and 20 percent ad valorem. Duties on most canned fish and shellfish range from 20 to 30 percent. Few items are less than 10 percent, or duty free. In addition to the common external tariff, special provisions for import control—the details of which are yet undetermined—will apply to fishery products.

Under the Treaty of Rome of March 27, 1957, the six Common Market countries agreed to establish a complete economic union. The treaty provides, among other things, for the gradual elimination of all tariffs and quotas on trade among the six countries and for the establishment of a single common import tariff on products from outside the area. This will impose common commercial policies; trade treaties with other countries will be negotiated by the Community as a unit.

Within the Common Market, customs duties and quantitative import restrictions on fishery products are to be gradually reduced and finally abolished over a period of not more than 12 years. The first reduction of duties was made on January 1, 1959, amounting to 10 percent of the national tariff rates in force on January 1, 1957. Any reductions in customs duties that were above the common tariff were extended to other countries. A second cut, of 20 percent, was made on July 1, 1960. Also, bilateral import quotas are to be opened to all members and increased by 20 percent each year.

During the transitional period, any member country may, on certain conditions, apply minimum prices below which imports are to be temporarily suspended or reduced. A council of Ministers will determine objective criteria for the establishment of minimum price systems. Other special provisions allow for establishment of long-term contracts and for use of compensatory levies on imports.

By the end of the transitional period, a common fishery policy will be established. The general rules of competition provided for by the Rome Treaty are not automatically applicable to fisheries. Special rules may be determined by the Council. To achieve aims of a common policy, the Community may adopt a basis for organization of fish marketing, set rules of competition, and coordinate national market organizations in their effort to unify markets, prices, and support policies. The outcome will depend upon the policies followed by the Council in working out the details. Arrangements for implementing these provisions have not yet been worked out by the Council.

The common external tariff was generally derived from a simple arithmetic average of national duty rates but the customs duties for most fish products were negotiated by special agreement among the six countries. For example, the proposed common external duty for canned sardines is 25 percent ad valorem. Present rates in effect are 15 percent in the Benelux countries (Belgium, the Netherlands, and Lux-

embourg), 31.5 percent in France, 14 percent in West Germany, and 27 percent in Italy. Rates in effect for fresh and frozen fillets of sea fish are free in Benelux countries, 35 percent in France, 5 percent in West Germany, and 20 percent in Italy. The proposed external tariff is 18 percent. During the transition period, the rates of duty for the Benelux and West Germany must be raised, and those for France and Italy reduced.

Many of the present duties of the member countries are subject to concessions made in previous trade agreement negotiations. Changes in these duties to the common external tariff will require renegotiation of concessions. Beginning in early September 1960, the United States and other members of the General Agreement on Tariff and Trade (GATT)will meet in Geneva to confer with the Common Market, under provisions of Article XXIV, paragraph 6. This section, although noting that weight should be given to decreases in duties which may be made in arriving at a common external tariff, provides for the granting of compensatory tariff concessions by the customs union to offset increases in rates previously negotiated by its members. Furthermore, it is still undetermined which, if any, of the duty rates in the common external tariff will be considered "bound." Such items would require compensation to other countries if the Common Market should decide to raise the duties.

Exceptions to the common external tariff have been requested by several member countries. Italy has requested duty-free quotas for fresh or frozen tuna and for stockfish and klipfish. Several, including West Germany, have asked for duty-free quotas on herring and fresh and frozen fish (except fillets). The extent of these exceptions to the common tariff is not yet known.

In January 1961, the members of GATT, including the Common Market, will negotiate new tariff concessions. These negotiations may result in further reductions in the external tariff of the Common Market.

Dutie	s for Selected Fishery Products in Common Tariff of the European Economic Commun	
Tariff Heading Nos.	Description of Goods	Ad valorem Duty Rates
02.04C	Other meat and edible meat offals, fresh, chilled or frozen (marine mammals)	19%
02.06C	Other meat and edible meat offals, salted, dried, or smoked (marine mammals)	24%
03.01	Fish, fresh, chilled, or frozen:  A. Fresh-water: I. Trout and other salmonidae II. Other  B. Salt-water: I. Whole, headless or in pieces: a. Herrings, sprats and mackerel: 1. From Feb. 15 to June 15 2. From June 16 to Feb. 14 b. Tunny and sardines c. Other II. Fillets C. Livers and roes	16% 10% Free 20% 25% 15% 18% 14%
03.02	Fish, salted, in brine, dried or smoked:  A. Salted, in brine or dried:  I. Whole, headless or in pieces:  a. Herrings and pilchards  b. Cod, including stockfish and klipfish  c. Sardines and other  II. Fillets:  a. Of cod, including stockfish and klipfish  b. Other	12% 13% 15% 20% 18%

Tariff Heading Nos.	Description of Goods	Ad valoren Duty Rates
03.02	B. Smoked	16%
(Contd.)	C. Liver, mes; fish meal	15%
03.03	Crustaceans and molluscs, whether in shell or not, fresh (live or dead), chilled, frozen, salted, in brine or dried; crustaceans, in shell, simply boiled in water.  A. Crustaceans:  I. Spiny lobsters and lobsters	25%
	II. Crabs, shrimps and crayfish III. Other (Norway lobsters, etc.)  B. Molluscs:  I. Oysters:  a. European or flat oysters (Ostrea edulis), weighing not more	
	than 40 grams each b. Other	Free 18%
	b. Other II. Mussels	10%
	III. Other	8%
05.05	Fish waste	Free
05.11	Tortoise-shell (shells and scales), un- worked or simply prepared but not cut to shape; claws and waste of tortoise-shell	Free
05.12	Coral and similar substances, unworked or simply prepared but not otherwise worked;	1100
	shells, unworked or simply prepared but not cut to shape; powder and waste of shells	Free
05.13	Natural spongesi	**
	A. Raw B. Other	Free 8%
05.14	Ambergris, castoreum, civet and musk; cantharides; bile, whether or not dried; animal products, fresh, chilled or	
	frozen, or otherwise provisionally pre- served, of a kind used in the preparation of pharmaceutical products	Free
05.15	Animal products not elsewhere specified or included; dead animals of Chapter 1 or Chapter 3, unfit for human consumption:  A. Fish of a length of 6 cm. or less	
	and shrimps, dried	5%
40.00	B. Other	Free
13.03	C. I. Agar-agar III. Other (thickeners extracted from vegetable materials)	4% Free
15.04	Fats and oils, of fish and marine mam- mals, whether or not refined:  A. Fish liver oil:  I. Of halibut	Free
	II. Other  B. Fish fats and oils, other than fish	896
	liver oils  C. Marine mammal fats and oils:	Free
	I. Whale oil II. Other	2% Free
15.08	Animal and vegetable oils, boiled, oxidized, dehydrated, sulphurized, blown or polymerized by heat in vaccum	171
15.10	or in inert gas, or otherwise modified  Fatty acids; acid oils from refining; fatty	15%
13,10	alcohols: A. Stearic acid	12%
	B. Oleic Acid C. Other fatty acids; acid oils from refining	10%
	D. Fatty alcohols	13%
15.12	Animal or yegetable fats and oils, hydrogenated, whether or not refined, but not further prepared: A. Imported in immediate containers	
	of a net capacity of 1 kg. or less B. Otherwise imported	20% 17%

Tariff Heading Nos.	Description of Goods	Ad valorem Duty Rates
16.04	Prepared or preserved fish, including caviar and caviar substitutes (includes canned products):  A. Caviar and caviar substitutes  B. Salmonidae  C. Herrings  D. Sardines  E. Other	30% 20% 23% 25% 25%
16.05	Crustaceans and molluscs, prepared or preserved (includes canned products)	20%
23.01	Flours and meals, of meat, offals, fish, crustaceans or molluses, unfit for human consumption; greaves:  A. Of meat and offals; greaves  B. Of fish, crustaceans or molluses	4% 5%
23.07	Other preparations of a kind used in animal feeding:  A. Fish and whale solubles	9%
32.09	A. I. Pearl essence	16%

FISHING LIMITS

### SOME AGREEMENT REPORTED IN NORWEGIAN-BRITISH TALKS:

Important progress was achieved and a substantial measure of agreement reached in the negotiations between Britain and Norway on fishing limits and fishery relations, according to the statement issued in London and Oslo on July 1, 1960.

The negotiations took place in London from June 23 to 28. The two delegations then indicated they wished to obtain further instructions from their Governments before meeting again.

The statement issued said: "It is confidently assumed by both parties that a final agreement will be reached within the next few months well ahead of any change of the present situation in regard to fishery limits."

Since the talks have been held in the light of Norway's declaration in May 1960 of an intention to extend fishing limits from the present 4 miles to 12 miles, this statement would mean that agreement is expected before Norway puts her intention into practice.

Presumably good progress has been made towards an agreement whereby British trawlers would continue to fish in Norwegian waters during a phasing out period of 10 years while Norwegian claims to exclusive fisheries up to 12 miles would be respected after the phasing out period.

Such an agreement would follow the lines of the Canadian-United States proposal which both Governments supported at the Law of the Sea Conference at Geneva this spring, but which failed by one vote to win general acceptance.

Any Anglo-Norwegian agreement must be capable of being fitted into a wider multilateral agreement, and must not prejudice the present legal position of each side. (Fish Trades Gazette, July 2, 1960.)

GENERAL AGREEMENT ON TARIFFS AND TRADE

## SIXTEENTH SESSION OF CONTRACTING PARTIES ENDED ON JUNE 4:

The 42 countries participating in the work of the General Agreement on Tariffs and Trade (GATT) ended their Sixteenth Session in June 4, 1960. This was after three weeks of intensive work in Geneva on current problems of international trade. Noteworthy developments at the Session included announcements by a number of countries on planned reductions of import restrictions; an examination of the European Free Trade Association and the Latin American Free Trade Area; agreement to attack the problems involved in "market disruption" which may be caused by sudden increases in imports of specific commodities; further progress in carrying out the GATT "program for the expansion of international trade;" and agreement on arrangements looking towards the provisional accession of Spain and Portugal to the General Agreement.

During the Session various delegations announced actions they are taking or plan to take in the further removal of import restrictions. According to statements made by representatives of the Netherlands, Belgium, Germany, Malaya, and Italy, these countries will announce new liberalization lists in the near future. It is expected that import restrictions will be removed on a number of products of particular interest in the United States. Furthermore, the United Kingdom and Australia stated that action will be taken looking toward the easing of remaining restrictions. These announcements are particularly gratifying to the United States, which has played a leading role in the drive for the removal of import restrictions by countries which have emerged from balance-of-payments difficulties.

The GATT Balance-of-Payments Committee held consultations before and during the

Session with a number of countries (Austria, Brazil, Greece, India, South Africa, and Uruguay) which still maintain import restrictions for balance-of-payments reasons. The United States took an active part in these consultations in order to encourage the maximum possible degree of progress in the further removal of restrictions that hamper the export of American goods.

The Contracting Parties discussed the question of the best way to deal with the import restrictions that may be retained after a country renounces its resort to the balanceof-payments exception in the agreement. There was a consensus that the full influence of the Contracting Parties should be used to minimize the extent of such restrictions and that the existing procedures of the Contracting Parties should be applied effectively and expeditiously to any restrictions that are retained. To expedite action a Contracting Party that emerges from balance-of-payments difficulties should promptly report any residual restrictions to the Contracting Parties, present its plans and policies for dealing with them, and stand ready to consult with other countries whose export interests are affected by the restrictions.

Specific commodity problems were discussed by the United States delegation on a bilateral and informal basis with other delegations, including those of Austria, Belgium, Denmark, Germany, and Italy. The discussions included a number of agricultural and industrial commodities for which American producers and exporters had requested information and assistance regarding trade restrictions. It is hoped these conversations will result in the relaxation of restrictions on United States products in the near future.

The Convention for the Establishment of the European Free Trade Association (EFTA), which had recently been ratified by Austria, Denmark, Norway, Portugal, Sweden, Switzerland, and the United Kingdom, was examined by the Contracting Parties in the light of relevant provisions of the GATT. The spokesman for the "Seven" emphasized that the Stockholm Convention had been drawn up with the intention of freeing their trade not only with one another, but also with the rest of the world. He stated that the signatories to the Convention were agreed that their cooperation in the EFTA should be firmly based on the principles of the GATT. The United States representative expressed the belief

that, while certain aspects of the trade arrangements provided for in the Convention raised questions which might call for an adjustment on the part of the member states, the Stockholm Convention on balance deserved the support and approval of the Contracting Parties to the General Agreement. The provisions of the Convention were subsequently examined and discussed in detail by a Working Party, which submitted an interim report. It was agreed that the consideration of the Stockholm Convention should be continued at the Seventeenth Session.

The Latin American Free Trade Area was also discussed at the current Session. This new free trade area was established by the Treaty of Montevideo, signed on February 18, 1960, by representatives of four countries which participate in the GATT (Brazil, Chile, Peru, and Uruguay) and three which do not (Argentina, Mexico, and Paraguay). The spokesman for the signatory governments explained the purposes and the general provisions of the Treaty, emphasizing the conviction that it would contribute to an expansion of world trade. The United States delegation endorsed the Treaty objectives of achieving higher standards of living and accelerating economic development through elimination of intraregional trade barriers and the maximum utilization of productive factors. The signatory governments were assured that the United States would give sympathetic and serious consideration to the Treaty during the GATT review. The Contracting Parties created a Working Party to examine the Treaty in the light of its conformity with the objectives and provisions of the General Agreement.

The European Economic Community (EEC) reported on the progress it has made during the last six months in integrating the six member states. The spokesman stated that the more quickly integration is achieved, the more dynamic, open, and liberal will be the trade policy of the Common Market. In the ensuing discussion the United States and other contracting parties emphasized the importance of liberal trade policies by the Community. The United States and other agricultural exporters expressed concern about some of the agricultural proposals now under consideration in the EEC and stressed the need for assuring the highest possible level of international trade in agricultural products. In a separate statement a Commission spokesman discussed the Commission's preparations for participation

in the 1960-61 tariff negotiations, which, to a large degree, will be concerned with the new EEC common external tariff.

There is serious concern that sharp increases in imports in a narrow range of commodities could have adverse economic, political and social repercussions in some importing countries. As a result, quantitative restrictions on trade, particularly against manufactured exports coming from Japan and the less developed countries of Asia, continue to be widespread.

To meet these two related problems the Contracting Parties laid out a broad work program with the view to finding practical ways to facilitate an expansion of trade while avoiding possible adverse effects stemming from sharp increases.

The new program designed to deal with the problem of "the avoidance of market disruption" will be undertaken by a special Working Party established at the Session. Its first task will be to consider certain factual material already compiled by the GATT Secretariat on instances of possible market disruption, and to suggest multilaterally acceptable solutions consistent with the GATT principles for those problems which call for immediate action. The Working Party will try to develop suitable and temporary safeguards which would prevent market disruption and would permit further progress in eliminating the restrictions which now limit exports from Japan and the less-developed countries.

The second part of the Working Party's program will consist of a study of the basic factors involved in problems of market disruption.

The study will include an examination of the relevance to international trade of differences in wages, social changes and productivity among countries. In making arrangements for the study, the Working Party is expected to draw upon the services of experts in the field and of the International Labor Office.

At the 16th Session, the Contracting Parties reviewed the work of two special committees which had been set up to help promote the expansion of international trade and which had been meeting between sessions.

Committee II continued its consultations with individual countries on their agricultural policies as part of its work in carrying out its mandate to explore ways of expanding agricultural trade. Since the consultations began last September, 29 countries have been consulted, including the most important agricultural exporters and importers. This phase of the work is soon to be completed. The data gathered on a country basis will now be studied commodity by commodity to focus attention on the specific obstacles to expanding trade in particular products.

Committee III is seeking ways to expand the export earnings of the less-developed countries, thus accelerating their development and enabling them to be less dependent on foreign aid. The Contracting Parties approved the report of the Committee's March meeting where principal obstacles to increased exports of the less-developed countries had been identified. These consisted of high levels of revenue duties and internal fiscal charges, higher tariffs imposed on imports of processed goods compared to raw materials, tariff preferences, severe quantitative restrictions some of which discriminate against less-developed countries, state monopolies, and price-support policies of the industrialized countries. The Committee will examine the progress the industrial countries make in reducing these obstacles.

During the Session just ended, Portugal and Spain announced their desire to accede to the General Agreement. There was widespread support for these applications. It is anticipated that Portugal and Spain will engage in the negotiation of tariff concessions during the GATT Tariff Conference to be held in Geneva beginning September 1, 1960.

In addition, the GATT Executive Secretary was asked to begin consultations looking towards the eventual accession to the GATT of the newly-independent countries of Cameroon and Togo.

The Contracting Parties discussed the meetings held in Paris in January and March 1960 on economic matters. These meetings, attended by the 18 OEEC countries, the United States, Canada, and the Commission of the EEC, considered the reconstitution of the OEEC and certain European trade matters. The discussion of this item at the 16th Session centered mainly on the proposal for a new Organization for Economic Coopera-

tion and Development (OECD). Some concern was expressed by the Contracting Parties which would not be participating in the new organization about the role of the OECD in the trade field. The United States delegation reaffirmed its view that the GATT had a primary position in the field of international trade. Other delegations whose governments are participating in the Paris meetings also assured the Contracting Parties that it was not the intention to weaken in any way the position of the GATT. It was also made clear that any actions in the trade field would be in accordance with the provisions of the GATT. As evidence of their determination to observe GATT principles, the participating governments pointed to the fact that the Executive Secretary of the GATT took part in the discussions in Paris.

The Contracting Parties also dealt with technical reports which had been prepared by Groups of Experts regarding restrictive business practices, subsidies, state trading enterprises, and anti-dumping and countervailing duties.

\* \* \* \* \*

### ADDITIONS TO UNITED STATES LIST OF ITEMS FOR TRADE AGREEMENT NEGOTIATIONS:

The United States in June made public an extensive list of imported commodities, including fishery products, on which it will offer to make tariff concessions in international negotiations at Geneva in September 1960. The following fishery items were not listed previously:

proved a proposal for the establishment of a Council.

Under the terms of a Decision, adopted in plenary session, a "Council of the Representatives of the Contracting Parties to the General Agreement" has been established. It is composed of representatives of all contracting parties willing to accept the responsibilities of membership in the Council.

In the course of the discussion in plenary session a number of delegates gave whole-hearted support to the proposal to establish the Council. It was pointed out that this extension of the organization of the GATT would undoubtedly result in a more efficient handling of the business of the Contracting Parties.

The functions of the Council will be:

- (1) To consider matters arising between sessions of the Contracting Parties which require urgent attention, and to report thereon to the Contracting Parties with recommendations as to any action which might appropriately be taken by them.
- (2) To supervise the work of committee, working parties, and other subsidiary bodies of the Contracting Parties operating intersessionally, providing guidance for them when necessary, examining the reports of such bodies, and making recommendations thereon to the Contracting Parties.
- (3) To undertake preparation for sessions of the Contracting Parties.

Tariff Par.	SCHEDULE A Stat. Class. (1959)	Brief Description	Duty July 1, 1958	U. S. Imports 1959
66	8420 270	Pearl essence	11%	US\$1,000 761
1509	9724 000	Pearl or shell buttons: Fresh water	1 <sup>3</sup> / <sub>4</sub> ¢ line per gross plus 25%	97
	9724 100	Ocean	1 decided in the ser gross 1 decided in the series 1 d	456
	9724 200	Button blanks, not turned, faced or drilled.	1¼¢ line per gross plus 25%	9

Note: See Commercial Fisheries Review, August 1960, p. 39.

\* \* \* \* \*

COUNCIL ESTABLISHED TO CONSIDER MATTERS ARISING BETWEEN SESSIONS:

The Contracting Parties to the General Agreement on Tariffs and Trade (GATT) ap-

(4) To deal with such other matters with which the Contracting Parties may deal at their sessions, and to exercise such additional functions with regard to matters referred to above, as may be expressly delegated to the Council by the Contracting Parties.

If a contracting party considers it is adversely affected by the exercise by the

Council of any of its aforementioned functions which involve recommendations to individual contracting parties or the making of determinations or taking of decisions, it may suspend the operation of such action by the Council through the submission of a written appeal therefrom to the Contracting Parties.

Regarding procedural matters, the Council will select its own officers. It will be permitted to establish such subsidiary bodies as it considers appropriate to carry out its functions.

INTERNATIONAL ASSOCIATION OF FISH MEAL MANUFACTURERS

#### MEETING HELD IN HAMBURG, GERMANY:

Delegates from 10 countries attended meetings of the executive and scientific committees of the International Association of Fish Meal Manufacturers in Hamburg, Germany.

A Food and Agriculture Organization (FAO) observer attended the meeting of the scientific committee, and it was later announced that arrangements had been made for cooperation between FAO and the association on matters of mutual interest.

Other plans advanced were those for the interchange of scientific information and the provision of technical advice to manufacturers,

INTERNATIONAL PACIFIC SALMON FISHERIES COMMISSION

#### FISHWAY BUILT IN 1955 AIDS FRASER RIVER TRIBUTARY SALMON ESCAPEMENT:

The delay in this year's spring flood in the Fraser River is the same as that which created a serious obstruction to the Early Stuart run of sockeye in 1933 and 1955 near Yale, British Columbia. The immediate construction of a fishway by the International Pacific Salmon Fisheries Commission after the occurrence of the obstruction in 1955 has more than paid for itself during the first two weeks of July by successfully passing the Early Stuart escapement. If the Yale fishway had not been in operation, a serious decline in the returning run in 1964 would be a foregone conclusion. The unladdered obstruction in 1955 reduced a spawning escapement of 35,000 fish to only 2,170 poor-quality spawners.

In spite of a complete closure to fishing in 1959, only 2,663 sockeye returned from the

1955 crop to spawn, thus necessitating another complete fishing closure in 1963 to permit full rehabilitation. The economic importance of having the Yale fishway in operation is obvious, the Commission reported on July 14, 1960.

\* \* \* \* \*

### SUCCESSFUL SOCKEYE SALMON SPAWNING FROM 1958 RUN TO ADAMS RIVER INDICATES GOOD RETURN IN 1962:

Widespread interest has been expressed throughout the salmon fishing and canning industry regarding the International Pacific Salmon Fisheries Commission's findings and opinions in respect to the success of reproduction of the 1958 "Adams River run" and what may be expected as a return of a dult salmon in 1962.



The isolation and assessment of the factors controlling total survival of sockeye is a relatively new study and while considerable progress has been made in the field by the Commission, any conclusions must be examined with caution.

Final estimates of the 1958 Fraser River system run approximate 19 million sockeye salmon, 15 million being produced in the South Thompson watershed ("Adams River run"). Of the 15 million fish, 72.3 percent or over was produced in Lower Adams River proper while 27.7 percent or less was produced in Little River and the South Thompson River below Little Shuswap Lake.

An examination of historical records indicate that the 1958 "Adams River run" may have exceeded an all-time record in production. The timing and size of the 1954 escapement was very favorable and spawning, incubation, and rearing conditions were excellent. In addition, sea survival probably approached a maximum which has not been equalled in the last ten years. With all factors favorable for the good survival of the 1958 run, it must be concluded that the pos-

sibility of a similar Adams River run reoccurring falls in the same category as the 50- or 100-year flood.

While the abundance of the 1958 Adams River run cannot be expected to reoccur except by chance, mistakes in regulation can cause unnecessary and drastic declines in survival. Data collected by the Commission demonstrate that if emergency and timely action had not been taken, the 1962 Adams River run would be a serious failure.

Unlike the parent 1954 run, the 1958 run was 10 days late in their arrival in the fishery. The run was extended and a large percentage of the escapement reaching the delay area off the mouth of the Fraser River consisted of fish of the latter part of the run. Regulation in the river was controlled to permit the first peak of escapement to reach the spawning grounds. These were healthy fish and were in top condition as many industry observers can testify. After the proper number of fish had escaped, at least 1.5 million fish of the latter part of the run remained to be caught. These fish likewise escaped because of a price dispute in the fishery. Their upstream migration was greatly extended with several hundred thousand failing to reach their spawning grounds. The late spawners arriving at the spawning grounds, estimated at over 1 million sockeye, were prevented from entering Adams River by an electric fence. These fish spawned on the shores of Shuswap Lake and in Little River which had already been fully seeded by good quality spawners.

Winter surveys revealed an excellent hatch in Adams River--none on the shores of Shuswap Lake (exposed by winter low water) and very few in Little River. It is quite apparent to the investigators that the bulk of the return in 1962 may be attributed to the installation of the electric fence. Had the fence not been installed, a failure in the 1962 run would have been a foregone conclusion irrespective of the degree of sea survival.

Observations by the Commission staff during the 1960 spring months have revealed a very substantial seaward migration of yearling sockeye from Shuswap Lake. Due to the volume of flow in the South Thompson, it is not possible to devise an accurate enumeration of the downstream migration. Indices

established in the spring of 1956, when the 1958 fish went to sea as yearlings, could not be used this year because of very adverse weather conditions and the resulting change in the character of the downstream migration. It can only be concluded from extensive field observations that this spring's migration was substantial—the Commission staff believes it to be less than that which produced the 1958 run. The size of the migrants for the two migrations compared favorably, indicating that rearing conditions in the lake were good.

If the sea survival of the two migrations being compared were approximately equal, it may be stated with confidence that a substantial run will return in 1962 although it would not equal that of 1958. Unfortunately, sea survival cannot as yet be accurately predicted, but it should not approach the record established by the 1958 run, thus causing a further diminution in the comparable size of the returning run.

Further estimates on the eventual size of the 1962 run will not be available until the fall of 1961 when the 3-year-old jack sockeye have returned to the spawning grounds. Whatever the size of the 1962 run, the Commission staff firmly believes that the electric fence placed in the mouth of Adams River forestalled a very serious failure in the success of reproduction. This conclusion is properly based on the excellent hatch in Adams River where the escapement was controlled by the fence and the very poor hatch in Little River where spawning was not controlled.

INTERNATIONAL WHALING COMMISSION

WHALING CONVENTION RATIFIED BY ARGENTINA:

The International Whaling Convention and schedule of regulations, signed at Washington December 2, 1946, and entered into force on November 19, 1948, has been ratified (with a reservation) by Argentina. Ratification was deposited on May 18, 1960.

Argentina on the same date also deposited its adherence (with a reservation) to the protocol amending the International Whaling Convention of 1946, done at Washington November 19, 1956, and entered into force on May 4, 1959.

INTERNATIONAL PACIFIC HALIBUT COMMISSION

# NORTH PACIFIC HALIBUT FISHING ENDED IN MAJOR AREAS:

Areas 2 and 1B Closed: The closure of the first fishing season in North Pacific halibut Areas 2 and 1B effective at 6 a.m. (P.S.T.) July 31, 1960, was announced by the International Pacific Halibut Commission on July 22, 1960. The Commission estimated that the 26.5-million-pound limit set for Area 2 would have been caught by the closing date. Area 1B, which has no catch limit, was also closed when the quota for Area 2 was attained.



A typical Pacific Coast halibut schooner.

Areas 2 and 1B this year were open to halibut fishing for 9l days, as compared with 68 days in 1959, 59 days in 1958, and 47 days in 1957. These same areas were fished for 38 days in 1956 (fishing started May 20), 24 days in 1955, 21 days in 1954, and 24 days in 1953.

The longer period required to catch the Area 2 catch limit this season is attributed to lighter catches and fewer vessels fishing the area.

The second fishing season in Areas 2 and 1B began at 6:00 a.m. (P.S.T.) September 11, for a period of 7 days without a catch limit. After 6 a.m. (P.S.T.) September 18, the areas were closed to halibut fishing until the commencement of the halibut fishing season in 1961. Area 2 includes all convention waters between Willapa Bay, Wash., and Cape Spencer, Alaska. Area 1B includes all convention waters between Willapa Bay, Wash., and Heceta Head, Oreg.

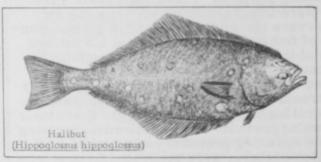
Halibut landings from Area 2 as of July 19, 1960, totaled 24.3 million pounds. In 1959 Area 2 closed on July 8. This is the first year that Area 3A closed before Area 2. Area 1B fishing seasons are identical to those for Area 2.

Area 3A Closed: Fishing in Pacific Halibut Area 3A ended at 6 a.m. (P.S.T.) on July 25, 1960. The Commission announced the closing of that area on July 5, since it estimated that by July 25 the catch limit of 30 million pounds for Area

3A would be reached. As of July 19, 1960, the landings of halibut from Area 3A were 25.6 million pounds. The Area 3A closure this year is 7 days earlier than in 1959 when fishing ended on August 1. In 1958 fishing in Area 3A stopped on August 31 and in 1957 on September 22.

Area 3A includes the waters off the coast of Alaska between Cape Spencer and Shumagin Islands. There will be no fishing in Area 3A until the season reopens in 1961.

This year Area 3A was open to fishing for 85 days as compared with 92 days in 1959. In 1958 the area was open to fishing for 92 days and in 1957 for 144 days (the longest season for the area since 1945 when the area was open to fishing for 147 days). Between 1945 and 1955 the trend had been towards a shorter season, but then the trend reversed itself and through 1957 the seasons were longer. However, beginning in 1958 the trend was reversed again and the seasons have become shorter. Area 3A was open for halibut fishing for 104 days in 1956, 81 days in 1955, 58 days in 1954, 52 days (shortest on record) in 1953, 60 days in 1952, 56 days in 1951, 66 days in 1950, 73 days in 1949, and 72 days in 1948.



The official opening date for all halibut fishing in the North Pacific regulatory area this year was May 1 at 6:00 a.m. (P.S.T.), except that fishing in Area 3B commenced on April 1.

The fishing season in Areas 1B and 3B will continue until 6:00 a.m. (P.S.T.) October 16. Area 3B includes all waters west of Area 3A including the Bering Sea. Area 1A is south of Heceta Head, Oreg.

Under authority of the Convention between Canada and the United States of America for the Preservation of the Halibut Fishery of the Northern Pacific Ocean and Bering Sea, this year's regulations became effective March 24, 1960.



### Aden Colony

### FISH LANDINGS INCREASED IN 1959:

Landings of fish in the Aden Colony were good in 1959, resulted in increased income during the year, and contributed to a holding down of the cost of living. Fish constitutes an

### Aden Colony (Contd.):

important item of diet in the Colony. Six additional motorized fishing boats were added to the Colony's fleet of those craft which numbered 60 as of late May 1960. The Fisheries Department continued its policy of aiding fishermen through loans to mechanize their boats.

Aden's Landings of Food Species, January-Oo		
Species	January.	-October
species	1959	1958
	(1,000	Lbs.)
Mackerel	893	1,010
Kingfish	633	215
Little tuna	61	44
Bluefin tuna	75	77

Nylon and synthetic fibres are being employed to an increasing extent and financial assistance is being given to fishermen to purchase better equipment through the Cooperative Fishing Gear Supply Society. (United States Consulate, Aden, May 25, 1960.)



### Argentina

FROZEN FISH NOW BEING SOLD FOR FIRST TIME:

Frozen fish have been offered in Argentine retail markets since about April 1,1960, for the first time. The fish are processed by a Mar del Plata firm, an established producer of canned fish and fishery byproducts. Five varieties of fish are now frozen-fillets of hake, "cornalitos," anchovies, swordfish, and squid. All are marketed in packages containing 400 grams (about 14 ozs.) of fish.

The processing firm has installed a freezing plant in one of its two factories located in the fishing port of Mar del Plata. The deepfreezing equipment was imported from the United States, and a special filleting machine was purchased in Germany. The fish are quick-frozen at a temperature of -40° C. (-40° F.). This firm does not maintain its own fishing vessels but purchases fish from the Mar del Plata fleet.

The company reports that the frozen fish have been well received although the project is still in the trial stages and the fish have been offered only in Buenos Aires. Approximately 40,000 packages were sold during April and May. Wholesale prices range from

11.90 pesos (about 14.3 U. S. cents at exchange rate of 83.2 pesos to US\$1) for the package of "cornalitos" to 27.50 pesos (about 33.0 U. S. cents) a package for the squid. In order to promote this new product, the firm has engaged in a newspaper advertising campaign stressing the convenience and flavor of frozen fish and offering suggested recipes. Production is to be increased soon and additional varieties of fish will be offered.

Two serious problems must be overcome, according to company representatives, before large sales increases can be expected. In order to sell frozen fish, grocers must have freezer-display cases capable of maintaining a constant temperature of at least -20° C. (about -4° F.); very few stores now have such freezers which cost approximately 30,000 pesos (about US\$361) each. The fish-freezing firm is encouraging grocers, delicatessens, and fish markets to obtain these freezers. Sales of frozen fish are now limited to about 180 stores which have deep freezer display cases. An equally difficult problem is presented by the traditional reticence of the Argentine public to consume fish. The firm hopes to overcome this obstacle through advertising, according to a June 27, 1960, report from the United States Embassy in Buenos Aires.



### Australia

BANS CANNED WHITING IMPORTS FROM UNITED KINGDOM:

After October 1, 1960, Australia banned imports of canned fish fillets labeled "whiting" from Great Britain because the whiting (Gadus merlangus) is different from the highpriced quality fish known as whiting in Australia. The technical names of the principal varieties of Australian whiting are: Sillago ciliata, Sillagi noides punctatus, and Sillago bassensis. The total Australian whiting catch in 1957/58 was three million pounds round weight. (United States Embassy, Canberra, July 1, 1960.)

CLOSED SEASON FOR FEMALE SPINY LOBSTERS:

From June 1 to October 31, inclusive, the taking of female spiny lobsters (Jasus lalandii) in the territorial waters of Victoria and Tasmania, Australia, and in the adjacent

\* \* \* \* \*

Australia (Contd.):

Commonwealth waters, is prohibited. The closure will apply in future years as of the same dates.

In 1959 the closure was from August 1 to November 30 for that year only, but it was announced that the future yearly closure would be from June 1 to November 30. The dates finally agreed upon are June 1 to October 31. (Australian Fisheries Newsletter, June 1960.)

\* \* \* \* \*

PREPACKAGED FROZEN FISH IMPORTED FROM GREAT BRITAIN:

Prepackaged frozen fish is being shipped to Australia from England and Scotland. Trade in Australia for prepackaged fish is expanding rapidly.

The fish is imported in Australia by the biggest food-processing organization in the Southern Hemisphere, with headquarters at Bathurst, New South Wales. The export manager said: "Our imports of fish from Britain have increased by 500 percent in the last three months, and we expect to buy about £1,000,000 (US\$2.8 million) worth within the next 12 months."

The fish, which are enjoying growing popularity in Australia, include whiting, flounders, and bream from Liverpool, Grimsby, Glasgow, and London. (Fish Trades Gazette, May 21, 1960.)



#### Brazil

EXPORTS OF SPINY LOBSTERS SET RECORD IN APRIL:

Exports of spiny lobsters from Recife, Brazil, to the United States set a new record of 50,236 pounds during April 1960. The month of April is usually considered to be part of the "off season" by Brazilian fishermen, the United States Consulate at Recife reported on June 22, 1960.)

\* \* \* \* \*

INSPECTOR TO BE PLACED ABOARD JAPANESE TUNA FISHING VESSELS:

A large Japanese fishing company presently has a contract with the Brazilian Govern-

ment which permits three of their vessels to base in Recife and fish Brazilian waters in exchange for selling their catches of tuna within Brazil. There have been increasing complaints about these refrigeration-equipped vessels returning to Recife after several weeks at sea with empty holds. The Commander of the Third Brazilian Naval District suspects that the Japanese land their catch of tuna in Trinidad where it is sold on a "free market" basis.

The Commander now plans to place one of his sailors aboard each such foreign-controlled vessel as a passenger and inspector. The Brazilian Navy also uses a total of six corvettes to patrol the northeastern waters and the fishing industry. (United States Consulate at Recife reported on June 22, 1960.)



### British North Borneo

FISHERIES TRENDS, JUNE 1960:

There is very little information on the landings of fish and shellfish in the British Colony of North Borneo. However, some statistics are maintained on the export trade in marine products. In 1959, North Borneo

Product	Quantity	Vali	ae
	1,000	Malayan	US\$
	Lbs.	\$1,000	1,000
Fish, fresh or frozen	1,410	343	112
Fish, dried or salted	1, 157	377	124
Shellfish (shrimp, clam meats, etc.)	187	120	39
Fish and shrimp meal	617	60	20
Pearl, trochus, and green snail shells	653	530	174
Other 1	46	75	22
Total	4,070	1,495	491

exported about 4.1 million pounds of marine products valued at about US\$491,000. As compared with 1958, the exports were higher by about 1.3 million pounds in quantity and US\$88,500 in value.

Marine fishing in British North Borneo (in the past mainly confined to inshore waters and estuaries), with an increase in use of power boats, has now been gradually extended to offshore waters. Three different methods of deep-sea fishing have been introduced and of the three, otter trawling is firmly established as catches have been and still are good. The other methods, namely: beam trawl for shrimp and rod-and-line fishing with use of live bait for tuna, have only been tried out recently and

British North Borneo (Contd.):

catches so far proved satisfactory. Trials on the use of the Hong Kong-type beam trawl for shrimp were carried out in the areas outside Sandakan Harbour. Results have been found to be promising.

A 210-ton Japanese tuna vessel, complete with live bait for bonito and tuna fishing with pole and line, arrived about June 1960 to try out fishing in the areas South of Si Amil Island. Catches have proved extremely good. Species of tuna caught were mainly skipjack or striped tuna and a small percentage of yellowfin tuna.

Fourteen fish ponds (covering a total of 4.03 acres) were constructed and stocked during 1959. The majority were situated in the Keningau and Tenom districts of the Interior Residency. Total number of fish ponds in the Colony at the year's end was 660 covering an area of 44.1 acres.

Total production of pond fish in 1959 was estimated at 18 tons. Retail prices for good pond fish (sold alive), although varying between different districts, was generally high. This, combined with a steady demand, did much to encourage the industry.

Yield of tilapia in "monosex" culture increased from 1,866 to 2,133 pounds per acre per year by adjusting the stocking rate. More and more fish farmers are adopting this method; there were  $4\frac{1}{2}$  acres of ponds in Keningan and  $2\frac{3}{4}$  acres in Tenom stocked with male tilapia at the end of 1959. (United States Consulate, Singapore, June 29, 1960.)



### Canada

VALUE OF BRITISH COLUMBIA FISHERIES DOWN SHARPLY IN 1959:

During the height of British Columbia's 1959 summer fishing season the entire industry was paralyzed as a result of a dispute between the fishermen and shoreworkers and salmon industry management over the price of salmon and wages for shoreworkers. Nevertheless, during the off-cycle sockeye salmon year of 1959, British Columbia fishermen caught more salmon than expected and exceeded the catch of the last cyclical year of 1955. It is estimated that the wholesale value of fish products marketed in 1959 will be a-

bove C\$66.5 million as compared to \$98 million in 1958, which was a very good year.

During the last three months of 1959, fishermen landed good catches of herring, which is second to salmon in value. However, depressed world oil and meal prices resulted in the reduction plants refusing to purchase any more herring after mid-December, effectively closing the season.

Halibut landings were up nearly one million pounds in 1959 as compared to 1958 which had a slightly longer fishing season. However landed values for halibut were down in 1959 from the preceding year due to a decline of about two cents a pound in average prices.

The restoration of sterling convertibility in the dollar area resulted in the United Kingdom becoming a ready buyer of British Columbian fishery products. British Columbia now sells more fish products to the United Kingdom than to the United States. In the first nine months of 1959, the United Kingdom imported \$11,530,965 worth of fish products as compared to United States imports of C\$9,629,500. During the same period, exports to countries of the European Common Market were good. (United States Consulate, Vancouver, June 14, 1960.)



#### Chile

PRODUCTION, FOREIGN TRADE, AND CONSUMPTION OF WHALE

AND SPERM OIL:

Chilean whale and sperm oil production shows a steady increase for the period 1957-60. Domestic consumption and exports also show an upward trend since 1958, although exports are expected to drop 23.1 percent in 1960 as compared with 1959. Imports are negligible.

(Metric Tons) 500 200 8,4 4/260 8,1	00
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	00
00 4/260 8.1	
	40
300   120   7,6	
iustrial use not available,	but
e of margarine.	
	dustrial use not available, e of margarine.

### Chile (Contd.):

The number of whales caught in 1959 totaled 2,620-the largest catch on record. In 1958, a total of 2,280 whales were caught and in 1957 a total of 2,512. Most of the whale

Products	1959	1958	1957
		(Metric Tons)	
Sperm oil	4,600	4,000	4,200
Whale oil	3,800	3,300	3,480
Total	8,400	1/7,300	7,680
Meat	250	210	220
Whale meal	1,400	1,020	1,050
Bone oil2/	1,900	1,600	1,800
1/Evidently the revised figu	re in table	1 is more accura	ite.

catch consists of sperm whales. (U. S. Foreign Agricultural Service Report, Santiago, April 25, 1960.)



#### Cuba

#### RESOLUTION RESTRICTS OYSTER HARVESTING:

The Cuban National Fishery Institute in a resolution published in the Official Gazette (Annual No. 102), May 30, 1960, restricts as of June 1, 1960, the exploitation of oysters (Crassostrea rizophorae) on all Cuban coasts, except in the Provinces of Camaguey and Oriente. Continued harvesting is permitted on the coasts of those two latter provinces, but the transport and marketing of oysters obtained in those provinces must be covered by a permit. The Resolution states that oysters were being overexploited on commercial ovster beds in the western part of Camaguey Province, resulting in the reduction in the average size. (United States Embassy in Habana, July 1, 1960.)



### Egypt

### REFRIGERATED TRUCKS FOR FISH TRANSPORT:

The Egyptian General Authority for Storage Affairs has received an appropriation of £E35,000 (US\$99,330) from the budget for the purchase of five refrigerated trucks. The new trucks will be used to transport fresh fish from Suez to other parts of Egypt. The trucks will be part of a larger program for establishing cold-storage centers and other-

wise expanding and improving the fisheries industry. (United States Consulate, Port Said, July 5, 1960.)



### German Federal Republic

# FISH PROCESSING WORKERS AT HAMBURG GET WAGE INCREASE:

Negotiations between the West German Food Workers Union and representatives of the Hamburg fish processing industry resulted in a wage increase of DM 0.11 (about 2.6 U. S. cents), or about 5 percent, per hour for workers in that industry retroactive to June 1, 1960. The increase would raise the hourly rate for those workers to about 55.4 U. S. cents an hour. (United States Consulate, Hamburg, June 23, 1960.)

\* \* \* \* \*

### IMPORTS OF FISH OILS, 1953-1959:

In 1959 West Germany's imports of marine fats and oils remained practically on the same level as in 1958. The share of edible marine oils in total fat and oil imports continued to decline due to a decline in use of marine fats and oils and a growing preference for vegetable oils by the margarine industry.

Year			Total	Imports	Percent Imported
4 0 614			Imports	from U. S.	from U.S.
			. (1,000 N	Metric Tons) .	Percent
1959			65.0	22.0	33.8
1958	*		64.3	21.3	33.1
1957			67.0	28.5	42.5
1956			84.0	39.0	46.4
1955			67.9	31.8	46.8
1954			109.2	34.2	31.3
1953			82.7	32.4	39.2

The United States share of West Germany's imports of fish oils, except for a slight increase in 1959 over 1958, has been declining steadily since 1955.

\* \* \* \* \*

# MORE ORDERS PLACED FOR STERN-TYPE TRAWLERS:

The West German fisheries have during the last two years put into operation a total of four stern-type trawlers. In addition, five West German deep-sea fishing companies have placed orders in recent months for 12 more stern trawlers. These orders form more than 50 percent of the 23 orders for deep-sea fishing vessels on the books of West

German Federal Republic (Contd.):

German shipyards as of late April 1960. The remaining 11 trawlers, which are all conventional, are the last of an earlier large-scale building program. The West German fishing companies for which these vessels are being constructed have indicated that any future orders will be for stern trawlers.

It would appear, therefore, that the West German fishing trade has become convinced that the stern trawler offers definite advantages over the conventional side-trawler. From experience gained from the operation of stern-type trawlers, it is probable that the West German fishing companies have found them more profitable than the side-type trawlers. (United States Consulate, Bremen, April 27, 1960.)

### Ghana

NEW FACILITIES FOR FISHING INDUSTRY:

The Government of Ghana is trying to in crease fish production in several ways. A cooperative fish marketing center with coldstorage facilities was opened by the Agricultural Development Corporation at Takoredi on May 18. The new fishing harbor at Elmina is now in operation and a large fish landing area with complete facilities will be available before the end of this year at the new port of Tana. The Government is encouraging canoe-fishermen to acquire outboard motors. A National Fishing Industries Board is to be established, presumably with Government capital, to promote further development in this important field. (United States Embassy, Accra, July 11, 1960.)



#### Iceland

FISHERIES AIDED BY NEW LAWS:

Certain laws affecting the fishing industry were passed by the Icenlandic Parliament (althing) before it adjourned June 3 until October 10, 1960.

The Price Control Act reorganizes price administration, including the establishment of a new price control committee made up of two Independence Party members, one each from the other three parties, and the Under Secretary of the Ministry of Commerce.

A bill providing for limited and controlled drag-net fishing for flounder within the 12-mile limit was also passed. This aroused considerable opposition from conservation advocates.

A step toward additional fish-quality control was voted to set up an inspection system for fresh and iced fish. This reflected strong recent demands in and out of the Parliament for measures to improve the quality of fish for export.

Both the fisheries and the shipyards are expected to benefit from another act which for the first time will permit loans from the Fisheries Fund direct to Icelandic shipyards for fishing vessel construction. (United States Embassy at Reykjavik, June 10, 1960.)

\* \* \* \* \*

### NORTH COAST HERRING FISHING SEASON UNDER WAY:

Early in June 1960, active preparations were under way for the opening of the Iceland north coast herring season.

The Coast Guard research vessel Aegir completed a survey which indicated a plentiful supply of plankton. Several herring plants have chartered a Norwegian vessel to shuttle the fish from fishing vessels to processing plants ashore. About 40 percent of the herring vessels have recently installed a new type of net-retrieving gear, patented in the United States.

Contracts for deliveries of north coast salted herring approximate those of last year: Soviet Union 80,000 bbls., Finland 51,000 bbls., West Germany 5,000 bbls., and Denmark 3,000 bbls. The Swedish contract for 85,000 bbls. was at a less favorable price, but was for 25,000 bbls. more than the 1959 contract.

A Herring Production Board representative is also attempting to conclude sales contracts in the United States. The 1959 Icelandic export to the United States was unusually small, amounting to only 94.5 metric tons. (United States Embassy at Reykjavík, June 10, 1960.)

\* \* \* \* \*

Iceland (Contd.):

#### FISHERIES TRENDS, JUNE 1960:

Total landings during the first four months of 1960 by Icelandic fisheries amounted to 201,103 metric tons as compared with 193,018 metric tons for the same four-months period of 1959. More cod and haddock were landed than ocean perch, which is a reversal of the 1959 trend.

The north coast Icelandic herring season was well under way at the end of June with landings up about fourfold from the same period of 1959. The 1959 North Coast herring fishery season was very good. On June 27, the Herring Production Board announced that the salting of herring could commence. Due to the low fat content of the earlier landings, most went to fish meal and oil reduction plants.

The good news regarding the over-all fish catch as well as the start of the herring season was clouded by the knowledge that fish oil and meal prices are extremely poor. Practically all storage facilities for both oil and meal in Iceland are filled with unsold stocks.

The Icelandic Freezing Plants Corporation announced on June 24, 1960, that it had concluded a contract for the sale of 2,500 tons of frozen herring to West Germany. Although the price was said to be somewhat lower than that received in Eastern Europe, the importance of gaining a foothold in that new market was stressed.

On June 17, the Iceland Foreign Office announced that Iceland had signed a multilateral trade and payments arrangement with Finland thus joining 13 other Western European countries in becoming a member of the "Helsinki Club." The agreement took effect on December 29, 1959.

In January this year, Iceland and Finland agreed to scrap the old bilateral barter trade agreement between the two countries. Icelandic salted herring will now enter free from Finnish import license requirements, the United States Embassy in Reykjavik reported on July 1, 1960.



### India

UNITED NATIONS SPECIAL FUND ALLOCATION TO INDIA FOR FISHERIES TRAINING INSTITUTE:

The Governing Council of the United Nations Special Fund on May 27 approved a program of 30 new projects and included among them was one of interest to fishery interests.

On the recommendations of a committee appointed to assess and review the training of fisheries officers, the Government of India has decided to establish a Fisheries Training Institute to train district fisheries officers for the Central and State governments and managers for the fishing industry as well as training instructors. There will thus be provided trained leaders in the techniques of developing and exploiting inland and marine fisheries. Such training could also be offered to applicants in other countries in southeast Asia. The Institute will be equipped with laboratories, a library and workshops, a fisheries training vessel, and an auxiliary boat, machinery and gear.

The Special Fund allocation is \$610,300 and the Indian Government's counterpart contribution is the equivalent of \$730,000. The duration of the project is three years and the executing agency is the Food and Agriculture Organization. The Special Fund will assist the Government of India in providing the services of experts, equipment, and fishing gear. The Indian Government contribution will provide counterpart personnel, buildings, fishing craft, and the payment of overhead costs.



#### Indonesia

FISHERIES LANDINGS IN NORTH SUMATRA HIGHER IN 1959:

According to the Fisheries Department of the Indonesian Province of North Sumatra (which is comprised of East Sumatra and Tapanuli), landings of fishery products in that area in 1959 totaled 62.3 million pounds, valued at Rp.225.4 million (about US\$7.1 million), as compared to 53.3 million pounds in 1958. The comparatively favorable weather conditions during 1959 were given as one reason for the larger catch.

Indonesia (Contd.):

During 1959, 40,456 fishermen (including 9,699 part-time fishermen) were engaged in the fishing industries in North Sumatra, of whom four-fifths were in East Sumatra alone. A total of 8,931 fishing vessels were used in North Sumatra of which 355 were motorized.

Most of the fishing enterprises (a total of 425) operating in East Sumatra are Chinese-owned, with only 64 Indonesian-operated. Of the 202 fishing enterprises in Tapanuli, only 3 were Chinese-owned.

For the past years plans have been made with United States help for the modernization of the fisheries of North Sumatra by using trawlers and long-lines. However, the plans have not been carried out because of the non-availability of funds from the Indonesian Government. The United States fisheries adviser stationed in Medan has returned to the United States and has not been replaced. (United States Consulate in Medan, June 24, 1960.)



### Japan

CANNERS AND EXPORTERS AGREE ON CANNED TUNA EXPORT PRICE:

Japanese tuna canners and traders in July settled the export price for canned tuna-in-brine. Canners agreed to cut the whitemeat price \$1 to US\$9.15 a case for the next sale (in July), but asked that it be raised to \$9.25 a case for the August sale. They want the l lightmeat price held to the present \$6.80 for the next sale (in July), and then raised to \$7 for the sale after that (in August). The traders accepted this plan. The July sale included 200,000 cases of white meat and 100,000 cases of lightmeat—the total for this year through July was 810,000 cases of whitemeat and 770,000 cases of lightmeat.

\* \* \* \* \*

MOTHERSHIPS TUNA FISHING OFF FIJI ISLANDS REPORT GOOD CATCHES:

The two Japanese mothership fleets fishing tuna off the Fiji Islands were continuing to make good catches. As of mid-July the No. 3 Tenyo Maru had taken aboard 3,340 tons, while the Nojima Maru had produced 3,800 tons.

The Tenyo Maru ceased receiving fish from July 12 to 16, in order to put 600 tons of tuna aboard the carrier No. 31 Banshu Maru, but was to begin taking fish from the catcher boats again on July 17.

The catches of the two fleets were: Tenyo Maru--albacore tuna 740 tons; spearfishes 274 tons; yellowfin tuna 1,905 tons; bluefin tuna 220 tons; sharks 174 tons. Nojima Maru--yellowfin tuna 2,660 tons; big-eyed tuna 342 tons; albacore tuna 285 tons; spearfishes 266 tons; skipjack tuna and sharks 159 tons. Both fleets had attained about 50 percent of their catch goals. Towards the latter part of July they were expected to move south and fish for albacore tuna. (The Suisan Keizai, July 20, 1960.)

\* \* \* \* \*

# SUMMER ALBACORE FISHERY FAILS TO LIVE UP TO EXPECTATIONS:

The 1960 summer albacore tuna season this year began amid predictions that a catch of 20,000 to 30,000 metric tons was certain, because ocean conditions were of the pattern found in years of good catches. The fishermen, therefore, hoped to make up this year for the poor catches of the past two years. However, due to two unexpected typhoons, the good fishing areas of the early part of the season failed, and the season ended badly late in June after a promising beginning. From the statistics assembled by mid-June, it was estimated that the total catch for this season will be approximately 20,000 tons, which is twice as much as last year and about 10 percent more than the year before last, but still less than the 25,000 to 30,000 tons of normal seasons.

This year the course of the warm Kuroshio Current was blocked off Shizuoka Prefecture by a cold-water mass, and the Kuroshio Current swung far out to the east, creating an unusually large outer boundary zone of low water temperatures as it moved northward. Consequently, there seemed to be a strong probability that albacore fishing grounds would be formed over a broad area extending from the coast out to distant waters, and right from the start the season was marked as one in which a big catch could be expected. Because of this fact, about 300 tuna boats assembled from all over the country at the ports of Yaizu and Shimizu, the size of the fleet far exceeding that of last year. Because of their poor catches of the past two years, the operators looked on this season as a crucial one, which would foretell the fate of the live-bait tuna fishery, and they were determined to make the most of it.

In mid-May, the fishery finally got under full swing. One boat after another brought its catch into Shimizu and Yaizu, and day after day tons of albacore were piled up in the markets of those ports. High boats brought in around 60 metric tons, the average was 10 to 15 tons, and the forecasts appeared to have hit the mark. At Yaizu, on May 30, landings reached 607 tons, breaking the previous record of 500 tons for the end of May set in 1957. However, although the total deliveries to the markets reached high levels, the catch per boat was unexpectedly poor. The majority of the boats brought in only 14 or 15 tons, and big catches were only about 30 tons. Top catches of about 56 tons were exceptional. A few years ago landings of 37 tons were nothing unusual.

There were probably various reasons for this, but there were three main ones: (1) The schools moved fast this year and responded poorly to the bait. (2) The Chilean tidal waves washed out bait stocks in many baiting areas and created a shortage of live bait. Fishermen tried using small mackerel as a substitute for sardines and anchovy, but it was unsuccessful. The poor response of the schools to bait is considered to have been due to the fact that the deep penetration of the cold Oyashio Current into the warm Kuroshio Current had created an abundance of food so that the fish were always full. (3) The presence of a large fleet on limited fishing grounds caused the boats to hold down each others catches by competition.

The result is that vessel owners are complaining that they are barely able to keep their heads above water financially. According to a survey at Yaizu, the boats belonging to that port made for the most part four trips and grossed only about 4-6 million yen (about US\$11,200 to \$16,800). It is said that trip expenses for a live-bait boat of the 100-ton class run around 800,000 yen (US\$2,240) and for a vessel of the 150-ton class they are 1 million yen (US\$2,800). Therefore, the income picture for this summer albacore season has been on the black ink side of the ledger, but it does not represent much as this is the fishermen's best opportunity for making money during the entire year. They feel that if they could land something over 10 million yen (US\$28,000) worth of albacore, that would be a different story.

In 1959 at Yaizu alone more than 10 boats gave up live-bait fishing and converted to long-lining, and the figure for the whole country was over 50 converted boats. One boat owner who has resolved to convert says that there is a strong probability that there will be others who will give up their traditional pole-and-line fishing. This trend also shows in vessel construction, with a clearly apparent move toward the building of purely long-line vessels. Last year in the Yaizu area there were 7 new long-liners built, two of them of 410 tons gross, but there was not a single livebait boat built. The result has been that in the membership of the Yaizu tuna fishermen's cooperative association, the vessels are now evenly divided, 30 pure long-liners to 30 combination long liner-bait boats. If more boats are converted to long-liners, the past makeup of the fleet will be reversed.

At any rate, if the typhoons had come one month later, as in normal years, the fishermen would have expected to make as good a catch as in 1957. (The <u>Suisan Keizai</u>, June 30, 1960.)

\* \* \* \* \*

#### SKIPJACK TUNA PORT LANDINGS LIGHT:

Normally in July Yaizu, the leading skip-jack port in Japan, would be bustling with the peak of the skipjack season, but it looks as if this year the skipjack have passed by Yaizu. June 1960 landings of all fishery products at Yaizu were 13,029 metric tons, worth 1,218 million yen (US\$3.4 million), 3,300 tons less than in June of last year. Landings of most tunas were above last year's, but skipjack, which make up the bulk of Yaizu's summer landings, were less than one-third of last year.

Last summer skipjack were unusually abundant, and in June landings were 10,000 tons, making up more than 60 percent of all

landings for that month. Every day there were landings of 300 to 400 tons, with a record one day of 890 tons of skipjack. This June skipjack landings were only 3,240 tons. Fishery operators are worried because daily landings have averaged only about 100 tons, and only a few days over 200 tons, and this on top of a mediocre summer albacore season. Ex-vessel prices are holding at a high level, with an average skipjack price for June 1960 of 88 yen a kilogram (US\$223 a short ton), just about double last year's price. (The Suisan Keizai, July 20, 1960.)

\* \* \* \* \*

### SINGAPORE BASE FOR EXPORT OF TUNA TO U. S. PLANNED:

OF TUNA TO U. S. PLANNED:

On July 14, 1960, the Japanese Export
Tuna Freezers' Association expected to confer with responsible officials of the Japanese
Fisheries Agency and the Ministry of Agriculture and Forestry on the question of establishing a base at Singapore. The main object of the base will be for transshipments, to facilitate exports to the United States.

The project has been under examination for a long time. (The Suisan Keizai, July 10, 1960.)

\* \* \* \* \*

#### JAPANESE BUILD MORE TUNA VESSELS:

The Japanese Fisheries Agency on July 19, 1960, announced granting of construction permits for 28 new fishing vessels, including 8 tuna vessels. Gross tonnages of the tuna vessels were 387, 279, 308, 299, 309, 339, respectively, and two 99-tons. (The Suisan Tsushin, July 21, 1960.)

\* \* \* \* \*

### CANNED SALMON PACK OUTLOOK FOR 1960:

The canned pack of pink salmon for export by canners of Hokkaido and northeastern Honshu, Japan, including land packs of the mothership companies, is expected to be somewhat more than 700,000 cases (full-case conversion 350,000 cases, probably 48 1-lb.-can cases). However, pink and chum packs on the North Pacific factoryships were reported in mid-July to be unexpectedly low, and there are strong indications that consignments to the Japanese Canned Salmon Joint Sales Company (which handles export sales) this year will be only about 1.35 to 1.4 million cases (last year they were about 2.31 million cases).

Factoryship pack of chums was expected at first to be about 270,000 cases (of which about 150,000 cases would be for the domestic market), but the price of fresh and salted chums has been extremely high and canned production has been given secondary consideration. Furthermore, the fact that the export price is lower than the domestic price has helped to hold the pack of chums for export to around 60,000 to 70,000 cases.

The fishing season for pinks was expected to be at its peak in mid-July, but the catch was unexpectedly poor. Around 250,000 to 300,000 cases (of which 50,000 cases will be for the domestic market) will be all that will be packed. If North Pacific mothership salmon fishing is continued right up to the end of the legal season, it is expected that production of silvers may be higher than last year, but even so informed sources believe that mothership packs of canned salmon for export may amount to only 1 million to 1,050,000 cases. (The Suisan Tsushin, July 20, 1960.)

\* \* \* \* \*

HIGH PRICES FOR FROZEN SALMON RESTRICT MARKETING:

Japanese salmon dealers (there are about 120) in the Tokyo Central Market say that because of the drastic decline in salmon receipts and very high prices, fresh and frozen salmon has completely lost its marketability. There is a little fish coming into the market from the salmon mothership fleets. As of the end of June the price had not been settled between the mothership operators and the fishermen and, as a result, speculation kept the price so high that middlemen could not handle the fish. Prices for salmon from the eastern Hokkaido land-based fishery continue much higher than last year. (The Suisan Tsushin, June 28, 1960.)

\* \* \* \* \*

MOTHERSHIPS PAY HIGHER PRICES FOR SALMON IN 1960:

The Japanese salmon mothership operators and the catcher boat operators came to an agreement on salmon prices for this season. Agreement was reached on July 19, the 70th day since the beginning of their negotiations. The agreement was for a 20-percent increase in prices. In addition, the mothership operators are to pay for each catcher

Species	19	60	1	959	195	1.8
	-			US4/Fish	-	
Red	396.00		330.00		300,00	
Chum Pink	165.60	46.0 27.6	138.00	38.3	125,00	34.7
Silver and	139.20		116.00		205,00	

boat "cooperation money" in the amount of 120,000 yen (US\$333.50). (The Suisan Keizai, July 20, 1960.)

\* \* \* \* \* \*

NORTH PACIFIC MOTHERSHIP SALMON FISHERY TRENDS, EARLY JULY 1960:

The Japanese North Pacific salmon mothership fleets, which had poor fishing early in the season because of stormy weather and a scarcity of pink salmon, as of early July 1960 got into the peak of their season. Catches picked up, and on the average the 12 fleets had taken about 70 percent of their catch quotas. It was considered almost certain that the motherships which were doing best would finish their quotas as early as July 25, with the slowest fleets making their full quotas and leaving the fishing grounds before August 10, the closing date set by the Soviet-Japanese fishery treaty.

Early in July the motherships Kizan, Kyoho, Shinano, Chiyo, Koyo, Miyajima, Jinyo, Eijin, Otsu, and Kyokuzan were fishing on grounds near Kamchatka, while Shoei and Kashima were fishing the more northerly grounds toward the Olyutorski area. In general, fishing was good for reds, chums, silvers, and chinook, and poor for pinks.

The fact that some vessels would end their fishing as much as 15 days ahead of the treaty closing date is due in part to the reduction of the total mothership catch quota from 100,000 metric tons in 1957 to about 54,000 tons this year, with each fleet's quota reduced proportionately.

The 33 salmon boats from the Ishinomaki area of northeastern Japan which were participating in mothership fleet operations in the North Pacific were expected to stop fishing early in August. According to reports to the Ishinomaki radio station, when they entered the Bering Sea fishing was poor and they had to move around a great deal in search of fish and were unable to fish long in any one area. Early in July they moved westward, following the red salmon, and almost all of the fleets reported good fishing.

Export canners of the Ishinomaki district of northeastern Japan early in July had begun working on large shipments of North Pacific salmon, but it looks as if their production will be down from 20 to 40 percent, because of the cutback in the salmon catch resulting from the Soviet-Japanese fisery negotiations. Therefore, canners in Ishinomaki and Onnagawa are saying that they cannot break even unless the Canned Salmon Joint Sales Company's price for export to the United States is 20 or 30 percent higher than last year. Last year's price for a case of 96 No. 3 cans containing 110 grams (about 334 ozs.) was 7,800 yen (US\$21.68), but this year they are hoping for 8,200 to 8,500 yen (US\$22.80-\$23.63). Also, since last year the female cannery workers of the Ishinomaki district have been covered under a minimum wage system and are getting at least 165 yen (US\$0.46) a day. (The Suisan Keizai, July 10, 1960.)

Note: Also see Commercial Fisheries Review, July 1960 p. 56.

\* \* \* \* \*

NORTH PACIFIC MOTHERSHIP SALMON FISHERY TRENDS AS OF JULY 25, 1960:

The Japanese North Pacific salmon mothership Koyo Maru (7,658 tons gross), which has been fishing in the Aleutian area, reported to the Hakodate office of its owners on July 24, 1960, that it had filled its catch quota of approximately 4,200 metric tons and ceased fishing operations. The mothership departed the fishing grounds on July 23 and was expected to reach Hakodate around July 30.

The number of days of fishing this year for the North Pacific salmon motherships was normal, but the catch quota allocations were cut back, and there were severe limits on areas of operation. Pink salmon fishing was poor, because of limitations on net mesh size, but red salmon fishing was reported to have been good. It looked as if the mothership fleets would complete their catch quotas and leave the fishing grounds before the end of July. As of July 10, it was reported that daily salmon catches were about 80 tons for each fleet. As of July 16, the 12 salmon mothership fleets had caught 44,262 metric tons of fish (3,698.5 metric tons average per fleet), leaving less than 10,000 tons to go in their catch quota of 54,000 tons. By species, the catch was (in tons): reds 17,168; chums 23,991; pinks 2,344; silvers 324; chinooks

435. (Suisan Tsushin, July 19, and Keizai Shimbun, July 25, 1960.)

\* \* \* \* \*

CANNERS EAGER TO BUY FROZEN ALASKA SALMON:

The drastic cut in the catch quota imposed by this year's Japan-Soviet fisheries conference and the scarcity of salmon this season in the waters on the Asian side of the North Pacific have resulted in the Japanese salmon packers being short of fish to keep their canneries busy and their foreign customers supplied. In an unprecedented move to make up this shortage, Japanese salmon packers are attempting to import frozen red salmon from Bristol Bay, Alaska, where the fish were expected to be considerably more abundant this season than they have been in the past several years.

The first public reports of such projects came on July 4, 1960, when the Tokyo fisheries trade press announced that one Japanese food company had been granted by the Ministry of International Trade and Industry a foreign exchange allocation of US\$2,420,000 for the purchase of 3,000 tons of frozen red salmon from the United States to be processed in a Hokkaido cannery into approximately 150,000 cases of canned salmon. On July 14, it was reported that the Japanese company's example had been followed by a large Japanese fishing company and a trading firm, which had filed applications for approval of imports of 1,000 tons and 1,500 tons, respectively, of frozen Alaskan red salmon. The trading firm reportedly expected to pay about US\$800 a ton c.i.f. for the salmon.

There is no indication that any of these would be importers have located a firm source of supply for the fish. With the fishing season in Bristol Bay almost over, there is little time for maneuvering, and the Japanese industry does not appear to be particularly hopeful about its chances of getting any considerable amount of Alaska red salmon to process this year. (United States Embassy, Tokyo, dispatch of July 14, 1960.)

\* \* \* \* \*

FISH SCRAP PRODUCTION ESTIMATED FOR 1960:

The Japanese Fisheries Agency estimates that the production of fish-press scrap in Japan for 1960, excluding mothership fish meal and whale meal, will total 113,500 metric tons.

The breakdown is as follows (in metric tons): body scrap--saury 38,400; sardine 5,000; sand launce 3,300; yellowtail 2,000; macker-el scad 6,000; larval anchovy 4,000; miscellaneous whole fish scrap 6,600; total whole fish scrap 65,300. Fish waste scrap, 41,900. Other fish scrap 6,300. Adding 45,000 tons of fish meal produced on factoryships and 24,000 tons of whale meal, it is estimated that the total Japanese production of fish scrap and meal this year will amount to 182,500 metric tons. (The Suisan Tsushin, July 12, 1960.)

\* \* \* \* \*

FISH-MEAL PRODUCTION IN BERING SEA OVER 25,000 TONS:

As of July 18, 1960, the four Japanese fish-meal factoryship fleets operating in the Bering Sea had made a total of 23,716 metric tons of fish meal. In addition, the Tenyo Maru had produced 1,863 tons, making a combined total of 25,579 tons of meal. Production by each fleet as of July 18 was:

Gyokuei Maru: 5,519 tons of meal, 1,215 tons of solubles, 120 tons of fish oil, 1,962 tons of frozen products.

Soyo Maru: 4,693 tons of meal, 1,505 tons of solubles, 166 tons of fish oil, 5,691 tons of frozen products.

<u>Kinyo Maru:</u> 6,812 tons of meal, 835 tons of solubles, 151 tons of fish oil, 63 tons of salt cod, 121 tons of frozen products.

Renshin Maru: 6,692 tons of meal, 1,768 tons of solubles, 125 tons of fish oil, 2,432 tons of frozen products.

In addition, the <u>Tenyo Maru</u> has made 1,863 tons of meal, 9.64 tons of liver oil, 300 tons of fish oil, and 1,752 tons of frozen products.

Since there are 14,013 tons of meal available in Japan, and in view of the market conditions and the high domestic demand, it appears that there will be no exports, and all of the meal will be consumed within Japan. (The Suisan Keizai, July 22, 1960.)

\* \* \* \* \*

DISTANT-WATER TRAWLING PLANS OF FIVE BIG FISHING COMPANIES:

The Japanese trawl fishery in distant waters is marking a new development in the Japanese fish-

ing industry. The five large Japanese fishing companies are pushing construction of large trawlers. During this year the first stage of their plans will be completed, and they will be sending trawlers of 1,500 tons, 1,800 tons, and 2,000 tons gross to catch bottom fish off New Zealand, Australia, and the east and west coasts of Africa.

Vessels capable of operating as of mid-July 1960 total 5. There are 7 big trawlers under construction. This means that before this year is over there will be 12 large trawlers heading for the African and New Zealand grounds. It is anticipated that they will land about 8,000 tons of red bottom fish (probably snappers) for the Japanese domestic market annually, and about 4,000 tons abroad. Among the various kinds of "snappers" which these vessels will land, not all are in high demand in foreign markets. In addition to about six species of snapper-like fish, the boats will catch tongue sole, gurnards, cuttlefish, groupers, croakers, and other bottom fish. Some are suitable for export and some are not, and this will have to be taken into consideration in planning operations exclusively for foreign markets. Fortunately, the demand for red bottom fish abroad is strong and promises to develop further in the future. However, snappers also enjoy a good demand in Japan, and it may be more profitable to sell them on the domestic market. At any rate, the Japanese Fisheries Agency, in its next year's budget requests for distant-water trawling is talking in terms of licensing 25 such vessels in the next fiscal year, and so this fishery is attracting much attention as the "wave of the future" of the Japanese fishing industry.

Of the five companies engaged in distant-water trawling, the first has the No. 62 Taiyo Maru and No. 63 Taiyo Maru (each of 1,570 tons gross) operating on the east and west coasts of Africa. The No. 62 Taiyo Maru began fishing June 4 and was scheduled to return to port September 15. The No. 63 Taiyo Maru began fishing June 22 and was expected to return to its base next year. This same company has two 1,870-gross-ton trawlers building in the company's Hayashikane Shipyard, the first of which was launched early in July. Both vessels were expected to be completed before the end of this year and are scheduled to sail to the African coast late in November.

The two 1,570-ton boats were scheduled to return to port after one trip, with about 1,800 tons of bottom fish. Depending on the demand for their catch in Japan, both of them may fish exclusively for the domestic market. For this reason they are not equipped with filleting machines. The two 1,870-ton vessels will fish for export, landing about 5,000 tons of fish a year in Greece and other European countries as fillets, fish-sticks, and in the round.

The second of the five companies has two trawlers, the <u>Uji Maru</u> and the <u>Asama Maru</u>, fishing off Argentina and landing their catches to that country. The company has a large trawler, the <u>Tenjo Maru</u> (2,250 tons gross) under construction. The sched-

ule called for her launching July 23, completion in September, and sailing for her maiden trip late in October. The Tenjo Maru, built at a cost of 530 million yen (US\$1,484,000), is the largest Japanese trawler--78 meters long (256 feet), with a beam of 13.5 meters (43 feet), a cruising speed of 14 knots from a 2,400-hp. Diesel engine, and a carrying capacity of 2,150 metric tons. Her maiden voyage was expected to be to the east coast of Africa. Operating plans call for two trips a year, with 100 days of fishing producing 1,500 metric tons of fish per trip for an annual total of 3,000 tons of "redfish" or snappers, all of which will be sold on the Japanese domestic market.

In view of the increasing demand in Argentina and in European countries for snapper species, some thought is being given to increasing the production of the Uji Maru and the Asama Maru.

The third of the five companies is building a 1,500-ton trawler at the Niigata Iron Works, which is slated for completion within the year. At first it was planned to build two such vessels, but the plan for the second has been changed to a 2,300-ton vessel, which will operate as a frozen whale-meat carrier in the Antarctic beginning next season. In the summer, the vessel will trawl off the African coasts. The 1,500-ton trawler will fish for export off New Zealand, and will export about 3,000 metric tons of fish annually to various European markets. The 2,300-ton vessel will fish off Africa, but will bring back slightly less than 3,000 tons of fish for the domestic market when it returns to Japan before the Antarctic whaling season.

The fourth of the five companies is building two 1,500-ton trawlers at Mitsubishi's Shimonoseki yards. One will be built this year and the second next year. Both vessels will fish off Africa, but the company is also thinking of using them for cod, halibut, and flounder in northern waters. The first vessel to be completed will be sent to Africa and its catch will all be exported to Europe.

The fifth company has chartered from a large Japanese fishing company the 1,000-gross-ton tuna long-liner Seiju Maru and is having her converted to a trawler at a Shimonoseki yard. The vessel was expected to sail from Tobata at the end of June 1960 to engage in trawling off northwestern Africa. Of the Seiju Maru's catch, 80 percent will be exported in the round to Europe and 20 percent will be filleted and shipped to the United States. The operators have been surveying the European market for red bottom fish (snappers), and have found acceptance very good.

This same company has been operating the trawler <u>Tatsuta Marie</u> off Northwest Africa. Her recent catches of "red fishes" or snappers were well received in Japan, showing that there is a high demand for this type fish.

A sixth company also is reported having plans to construct a 1,500-ton trawler in about a year.

(Suisan Keizai, July 17, July 12, and June 25, 1960.)

\* \* \* \* \*

# OYSTER-FREEZING PLANT BUILT WITH U. S. TECHNICAL AID COMPLETED:

On June 6, 1960, a large Japanese fishing company held ceremonies marking completion of the first plant in Japan designed for production of fresh-frozen oysters for export. The Hiroshima plant was planned and equipped under a technical agreement with a United States firm. Thus it will be possible for the first time to export to the United States raw Hiroshima oysters, which up to now have been sold mostly in the Japanese market. In addition to the frozen raw oysters, the Hiroshima plant will develop into a general food processing factory with canning and sausagemaking departments.

The three main points about the freezing installations that have resulted from the technical partnership with the United States company are:

- (1) Freon is used as a refrigerant in industrial quickfreezing for the first time. Generally in Japan for largescale quick-freezing, ammonia is used as the refrigerating agent.
- (2) By using unit coolers, the air-blast system is employed throughout for freezing and cold storage. Temperatures in the freezing rooms can be brought as low as -30° F., and the oysters are frozen while still loaded on special transporting buggies. The unit coolers and all the other latest types of machinery, such as water coolers, the air conditioning, and the all-automatic ice machine, can be controlled and operated from a central control panel.
- (3) Shucking of the oysters is done on a new type of installation. For the first time in Japan oysters will be shucked with knives on installations called "bunkers." The shucking tables and the floors are all of terrazzo, and the concrete that is used is of a type that will not crack and produce crevices in which germs can grow. Containers for the oysters are of stainless steel, washing is done with chlorinated water, and sterilization is complete, so that every effort has been expended on hygienic details.

The main parts of the plant are the oyster-processing plant, the refrigeration plant, the cannery, the ice plant, the boiler room, the sanitation control room, and the offices. The total area is about 9,496 square yards. The plant is able to (1) freeze 36 tons a day of oysters or shrimp, (2) store 600 tons of frozen products, (3) make 20 tons of ice a day, (4) can 2,000 cases per day, and (5) make 20,000 sausages a day. (Suisankai, June 1960.)

\* \* \* \* \*

# AUSTRALIAN RED SNAPPERS ON TOKYO MARKET FOR FIRST TIME:

The Tokyo fish market received on July 20, 1960, about two carloads of tropical red snappers, the first such shipment this year. The fish were caught off Australia by the 500-gross-ton trawler Shinano Maru. Up to now such fish have been marketed mostly in western Japan, but the dealers expect to develop a considerable market for them in Tokyo. Another trawler from the Australian grounds, the Ikoma Maru, was expected to return in August. (The Suisan Keizai, July 20, 1960.)



#### Kuwait

# DEVELOPMENT OF OFFSHORE FISHERIES UNDER CONSIDERATION:

Within the past year there have been several developments in the fishing industry of Kuwait. The most important one seems to have been that certain Kuwaiti merchants and shaykhs have been able to convince the Ruler of Kuwait that modern commercial fishing in the Persian Gulf will not be detrimental to the native fishermen and the Ruler has granted the merchants permission to engage in modern commercial fishing.

In the fall of 1959 a New York City firm sold fishing boats to a Kuwaiti merchant and supplied him with United States captains and crews. The Kuwaiti immediately embarked on an ambitious shrimp-fishing enterprise. Shrimp are caught, cleaned, and frozen on board the trawlers and then are delivered to freight ships for delivery to the New York City partner of the Kuwaiti for sale in the United States. This arrangement has proved profitable in the one-half season of operation. The fish, which are caught incidental to the shrimp operation, are sold on the local market at prevailing prices. There has been no corresponding reduction in price as a result of this activity as the Ruler himself has specified that native fishermen are not to be undersold. However, Kuwaiti citizens have benefited by a selection of fish generally larger than previously and by more regular supplies.

Another potentially important development has been the interest of one of the major Kuwaiti shaykhs in organizing a large Kuwaiti fishing fleet designed to operate not only in Kuwait waters but throughout the Persian Gulf. The shaykh's interest seems to have been inspired by a young Sudanese entrepreneur, who has been sent by the shaykh to investigate fishing opportunities throughout the Gulf. The Sudanese has just presented a report to the shaykh on his findings.

After reviewing the primitiveness of present-day fishing and the relatively small catches, the Sudanese points out that fishing nevertheless is quite profitable in the Gulf. Indeed, fishermen along the West coast of the Persian Gulf and the Gulf of Omah are able to export some quantities of dried fish. His conclusion is that scientific fishing in the Gulf, using local labor, could yield large quantities of fish and be capable of supplying a substantial export market.

The Sudanese in his report proposes setting up a fishing company in Kuwait which would own a fleet of trawlers and also buy the catch of local fishermen. The fish would be cleaned, frozen, and exported to other Arab countries or to Europe or the United States via merchant ships or by trading trucks operating between Kuwait and the states of eastern Mediterranean. He proposes furthermore building a fish cannery in Kuwait, a fish meal plant to use industrial fish and waste products from the fish processing. He also would build a plant for smoking fish and one for extracting oil from sar-

dines and shark livers. The Kuwaiti Shaykh and his Sudanese partner do not intend to operate the fleet themselves, but wish to enter into partnership with a foreign firm which would organize and operate the fishing fleet, build and operate the factories, and use its connections to dispose of the products. The Kuwaiti would probably do little more than supply the capital.

The shaykh also wishes to bring a professional ichthyologist to the Persian Gulf to conduct a scientific survey of the quantities and types of fish available and the size of the maximum sustained catch which would not deplete the fish supply. It is hoped that a United States firm or educational institution will be able to conduct this survey. It would benefit not only Kuwait, but all the riparian states.

An article in a Kuwait magazine claims that there are about 400 kinds of fish found in the Persian Gulf. It lists the primary edible fish as follows: zubaidi, sheem, nuwaibi, nagrour, biah, meed, sabiti, hamour, sha'am, hamman, shimahi, tabaglazag, shabamba'a, sabour, and khafaf. It also lists a number of fish which are found in the Gulf but which cannot be eaten, as well as a number of poisonous or harmful fish. The article states that one important aspect of Persian Gulf fish is the fact that there are very few brightly colored types. Most are light or dark gray, white, silver, light blue, or light red, whereas fish of the Red Sea and the southern Arabian peninsula are brightly colored.

In the section on present day fishing in Kuwait the article states that most fish are caught in the spring and the summer. It also says that the best fishing is "between the 11th and 18th of every lunar month, i.e. when the tides are strongest." The nets then are anchored and the tide sweeps the fish into them. (United States Consul in Kuwait, July 14, 1960.)

Note: Also see Commercial Fisheries Review, August 1960, p. 61.



#### Liberia

REGULATIONS ISSUED FOR MARINE AND INLAND FISHERIES:

The Liberian Department of Agriculture and Commerce has published the first detailed maritime and inland fishing regulations to go into effect in Liberia. These regulations follow:

(1) Establish mandatory license fees for commercial fishing vessels ranging from \$150 for trawlers to \$5 for native canoes, but exempt subsistence fishermen and persons under sixteen "who are not required to have license to fish."

### Liberia (Contd.):

- (2) Authorizes the Bureau of Fisheries to prohibit fishing gear harmful to fishery resources and particularly prohibits dynamiting.
- (3) Authorizes the Bureau of Fisheries to close any fishing zone because of overfishing resulting from use of certain types of fishing gear.
  - (4) Establishes mesh regulations.
- (5) Requires monthly reports from commercial fisheries, with respect to area of catch, tonnage, gear used, value of catch, and species of fish caught.

Although enforcement may prove to be a problem, these regulations represent a useful first step toward better management of Liberia's fisheries resources. They should also be helpful in developing, over a period of time, more accurate information on the extensive, but inaccurately charted coastal fisheries resources of the country. (U. S. Embassy in Monrovia, June 26, 1960.)



### Malaya

### TUNA VESSELS ASSIGNED TO MALAYA:

The Japanese Overseas Fisheries Company signed contracts for two 100-ton tuna vessels from Kochi Prefecture to proceed to Penang, Malaya, the latter part of July 1960. Negotiations were being carried on for another two vessels, which were scheduled to sail in August. The company already has under charter one vessel, which is being used jointly with a Ceylonese company. (The Suisan Tsushin, July 8, 1960.)



#### Mexico

CARMEN-CAMPECHE AREA SHRIMP LANDINGS AND EXPORTS, OCTOBER-DECEMBER 1959 AND JANUARY-MARCH 1960:

Total landings (estimated from all available sources) of shrimp at Mexico's Gulf Coast ports of Campeche and Carmen in the fourth quarter of 1959 were about 2,535 short tons. About 1,750 tons were landed at Car-

men and 785 tons at Campeche. Estimated percentages by species were 57 percent pink, 8 percent brown, and 35 percent white in the Carmen area and 84 percent pink, 5 percent brown, and 11 percent white in the Campeche area.

Total landings of shrimp at those two ports in the first quarter of 1960 were about 1,479 short tons of which 1,071 tons were landed at Carmen and 408 tons at Campeche. Estimated percentages by species were 42 percent pink, 13 percent brown, and 45 percent white at Carmen and 80 percent pink, 6 percent brown, and 14 percent white at Campeche.

A small portion of the Campeche-Carmen area landings is marketed domestically and is made up principally of culls and small shrimp. No figures by size or species are available because it is not possible to determine the disposition made of the quantities consumed locally or included in domestic shipments. It is generally estimated that the domestic consumption does not exceed 10 percent of the tonnage landed.

During the last quarter of 1959, a total of 2,191.7 short tons (statistics from the Fishing Office--Oficina de Pesca) were shipped to the United States--1,644.3 tons from Carmen and 547.4 tons from Campeche.

During the first quarter of 1960, a total of 1,344.9 short tons of frozen shrimp were shipped to the United States--973.8 tons from Carmen and 371.1 tons from Campeche. Except for a few hundred pounds, all exports go to the United States.

Other fishery products exported from the Carmen-Campeche area to the United States during the last quarter of 1959 included 206,000 pounds of frozen fish, 2,293 pounds of shark fins, and 9,731 pounds of shark skins. During the January-March 1960 quarter other exports included 192,986 pounds of frozen fish, 3,395 pounds of shark fins, and 14,204 pounds of shark skins. (United States Consulate, Merida, June 22, 1960.)

\* \* \* \* \*

### SHRIMP INDUSTRY TRENDS, JUNE 1960:

What in late May looked like the beginning of an early rainy season fizzled out. As a result, prospects for another record year for Mexico's west coast shrimp fishery are less promising.

### Mexico (Contd.):

The trend towards peeling and deveining of shrimp in the Gulf of Mexico in the Carmen-Campeche are is on the increase. Reports from various industry sources indicate that current shrimp exports from that area are about 80 percent or more peeled and deveined.

The Carmen-Campeche "price war" over independent boats continued into July, although the only increase between May 19 and July 5 was in the price of white shrimp which was increased one cent a pound across the board. To discourage landings of small shrimp, prices on 66-and-over count shrimp were dropped from 26 to 18 cents a pound. No changes in Salina Cruz (west coast) ex-vessel prices were reported recently.

Ex-vessel prices in U. S. cents a pound for independent vessels at Carmen and Campeche for white shrimp as of July 5 were as follows: under 15 count, 81; 15-20 count, 76; 21-25 count, 71; 26-30 count, 66; 31-35 count, 59; 36-40 count, 49; 41-50 count, 44; 51-65 count, 37; and over 65 count, 18. Ex-vessel prices for pink and brown shrimp were one cent a pound under the white shrimp price except for the over-65 count which was also 18 cents.

As expected at this time of year, landings at Salina Cruz on Mexico's west coast dropped off somewhat. Vessels were reported landing one to two tows per trip of 12 to 14 days. Landings at Carmen and Campeche picked up during June with vessels averaging around 1,300 to 1,500 pounds per trip in each place. At Carmen during the first half of the month, landings were mostly pinks and browns, but during the last half whites predominated, followed by pinks and a few browns. At Campeche landings averaged about 80 percent pinks during June. During the first half of June the remainder was about equally divided between whites and browns, but during the last half whites accounted for about 20 percent with only a scattering of browns.

Sizes at Carmen were fairly uniform throughout the month, averaging about 35 percent 30 count and under. Sizes at Campeche tended to decrease as the month progressed. During the first week landings were running around 75 percent 30 count and under and during the last week about 60 percent of the landings were of those sizes. (United States Embassy, Mexico, report of July 7, 1960.)

\* \* \* \* \*

### THIRD SHRIMP-BREADING PLANT ESTABLISHED:

The third shrimp-breading plant for Mexico was scheduled to start operating in the Pacific Coast port of Salina Cruz, Oaxaca, about mid-June 1960. But a July 5 report indicates that although all equipment has been installed, the plant was still operating only on a trial basis and training workers. It is reported that the plant will have a capacity of about 5,000 pounds of breaded shrimp (finished product) per 8-hour shift. In addition to breading, the plant will produce individually-frozen peeled and deveined raw shrimp.

When the plant is in full operation, Mexico's daily capacity for producing breaded shrimp in all three plants, will be about 15,000 pounds in 8 hours. Of the three plants one is located in Puerto Mexico, Veracruz, and two in Salina Cruz., according to a June 3, 1960, dispatch from the United States Embassy in Mexico City.

\* \* \* \* \*

### ENSENADA FISHERIES TRENDS, APRIL-JUNE 1960:

During the second quarter of 1960 landings of fish and shellfish in the Ensenada area of Mexico's west coast were down and many cannery workers were unemployed. Early reports from the abalone fishery indicated catches lower than anticipated, but with several months remaining in the abalone fishing season, catches could pick up.

There have been discussions between various groups of fishermen and a Federal Deputy concerning the failure of fishing cooperatives and alleged exploitation of fishermen. The Deputy promised to ask the Mexican Chamber of Deputies to study the possibilities of returning to free fishing, according to a June 23, 1960, report from the United States Consulate in Tijuana.

\* \* \* \* \*

### FISH MEAL AND OIL INDUSTRY:

Mexico has 15 fish-meal plants and one plant producing solubles. Of the meal plants only two are in more or less constant operation. The remaining plants are either shut down or are connected with canneries and only operate when fish and fish waste are available. Only four plants can be considered to have modern equipment. One of these produces only solubles and liquid fish. Another, designed for producing fish flour by the azeotropic process, has never been operated. One of the modern meal plants, located in Ciudad del Carmen, has a capacity of 10 tons of raw fish an hour and the other, in San Blas, Nayarit, can handle but one ton.

### Mexico (Contd.):

The other plants have old secondhand machinery, mostly purchased from plants in California, and practically all use direct-flame dryers. In this group only one plant is known to have centrifuges for separating the oil. The others use settling tanks.

If all plants were in operation, the total capacity would be 110 to 115 tons of raw fish an hour or about 180 tons of meal per 8-hour day, providing fish were available.

No new plants are being planned at this time. The present world price of meal is a decided deterrent.

The Mexican plants produced an estimated 2,000 to 3,000 metric tons of meal in 1959. The 1960 production should be considerably higher since the Carmen plant is now producing around 600 tons a month. In addition to the meal produced by the plants, there are 1,200 to 1,500 tons produced by sun-drying trash fish and scrap. Along the West Coast the fish are boiled and then laid out on the ground in the sun to dry. In Yucatan the scrap from a filleting plant is sun-dried without previous cooking. The dried fish are then pulverized in small hammer mills to make the meal.

The quality of the Mexican meal, as can be expected from the varying sources of supply and processing techniques, varies considerably. The meal sources for the Baja California plants come mostly from waste from California sardines and Pacific and jack mackerel with some waste from tuna and yellowtail. The West Coast sun-driers use 50 or more different species of fishes taken by shrimp trawlers and by weir fishermen. The San Blas plant uses trash fish caught with shrimp trawls and it also processes sharks and turtles. This is the only plant in Mexico that introduces solubles from concentrated stickwater into the meal. The Carmen plant uses mostly anchoveta (Cetengraulis edentulus), but some menhaden and other fish are also processed.

The sun-dried meal is the poorest quality because the protein content usually runs between 40 and 50 percent.

Table 1 - Analyses of	Three Samp Fish Mea		-Produced
Product	Sample 1	Sample 2	Sample 3
Moisture	8,80 63,50 0,96 14,90 9,06 2,78	(Percent) 6.3 66.6 0.3 22.1 8.4	9.72 62.63 - 9.80 - 1.59 10.02

From various reports, oil recovery runs between 2 and 8 percent. The average is probably around 3.5 to 4.0 percent. Mexican fish oil is all used locally. Most of it is used in the paint and tanning industries. The oil from the trawl-caught trash fish is reported to be quite high in stearines.

Generally the producers sell their oil at a fixed price and do not concern themselves with any analysis. One sample of Mexican fish oil was reported to have the following characteristics: pounds per gallon, 7.71; specific gravity, 0.925; color-Gardner 1933, No. 10; iodine number, 160; acid number, 1.59; and refraction index, 1.481.

Only two plants produce fish solubles in Mexico. The meal plant at San Blas concentrates the stickwater to about

40-percent solids and then adds it to the meal in the dryer. The production of this plant is quite small since it can handle only one ton of raw fish per hour.

In Ensenada one plant is dedicated solely to the production of fish solubles. Its capacity is reported to be about 5,000 gallons of 50-percent solubles per day. The plant has modern three-phase equipment for producing solubles. In addition this plant has two retorts capable of liquifying about 5 tons of fish waste per day. No additional enzymes are needed for liquifying the fish. The liquified fish are mixed with stickwater and processed to produce 50-percent solubles. The entire production of solubles is exported to California.

The millers who buy sun-dried fish usually pay 1.00 peso (8 U.S. cents) per kilo of dried fish, which after milling and bagging or sacking they sell for 1.50 pesos (12 U.S. cents) a kilo. Paper bags holding 25 kilos of meal cost 65 centavos (US\$0.052) and cloth sacks holding 50 kilos cost 2.80 pesos (US\$0.224) each.

Around Ensenada, most canneries own their own boats and reduction plants and the waste from the canneries is processed for meal and oil as a byproduct of canning. One company figured that sardines and mackerels caught by companyowned boats cost US\$40 per metric ton. It was reported that independent boats were receiving 400 pesos (US\$32) per metric ton of sardines and mackerel. If the fish are unsuited for canning, only 65 percent of this price is paid.

The plant at Carmen pays 200 pesos (US\$16) per metric ton of fish. This plant estimates its cost for meal, delivered in Mexico City, to be about 2,200 pesos (\$176) per metric ton.

The boats at San Blas, Nayarit, are company-owned and no separate accounting is kept of fish cost.

The Mexican Government, as an aid to feed producers, has restricted the importation of manufactured feeds. This has resulted in a considerable increase in the demand for fish meal by the feed producers. This restriction caused an upsurge of interest in fish-meal plants which quickly died out owing to the low price of Peruvian meal. On July 8, 1960, Peruvian meal was being offered in Mexico City at 1,637.50 pesos (US\$131) per metric ton. All Mexican meal producers are complaining of their inability to compete at those prices.

The Ensenada meal producers, who normally sell most of their product in the United States, are unable to compete with Peruvian prices either in the United States or Mexico. Freight and handling charges from Ensenada to the feed-producing plants are reported to be between US\$25.00 and \$30.00 per metric ton.

Import permits are not required on fish meal, but agricultural sanitary permits are. Import duties amount to US\$19.776 per metric ton.

In the production of meal, the Government as a severance tax charges 40 pesos (\$3.20) per metric ton of fish.

Import permits are required for fish oils. Import duties vary with the size of the container.

In containers weighing 50 kilos or less, the duty is 25 centavos per gross kilo plus 20 percent ad valorem. The official price for determining the ad valorem duty is 8.80 pesos per gross kilo.

In containers larger than 50 kilos, the specific duty is 25 centavos per gross kilo and the ad valorem is 7 percent. The official price is 6.30 pesos per gross kilo.

In tankers or tank cars, the specific duty is 20 centavos per net kilo and the ad valorem is 18 percent based on an official price of 5 pesos per net kilo.

In addition there is a port tax of 3 percent of the value of the import duties.

### Mexico (Contd.):

Other than import duties and restriction on the importation of manufactured feeds, the Government has given no assistance to fish-meal producers. Something may be done in the near future because of the complaints of the local fish meal producers.

The Carmen plant does not now save the stickwater but plans have been made to install a concentration plant so that the condensed solubles can be added to the meal.

An organization in Mazatlan is consulting with an English concern in an endeavor towards developing equipment that will permit partial processing of trash fish aboard shrimp trawlers. If such equipment can be developed satisfactorily, the shrimp fleet should be able to supply most of Mexico's fish-meal needs.

Under present world prices for fish meal, it is highly improbable that there will be any expansion in fish-meal production in Mexico in the immediate future unless the Government does something to assist the local industry.

When and if the price situation becomes rectified, it is probable that Mexico eventually will become self-sufficient with respect to both meal and oil. This day, however, is not in the immediate future. It seems very likely that some technique will be developed before long which will permit partial processing aboard shrimp boats. When this day arrives, Mexico can become self-sufficient and perhaps even enter the export market. Until then it is not likely that Mexico will be in a position to supply her own demands. (United States Embassy, Mexico, report of July 18, 1960.)



### Netherlands

ANTARCTIC WHALE CATCH, 1959/60 SEASON:

The Netherlands Minister of Agriculture reported on July 6, 1960, that the Netherlands Antarctic whaling expedition caught slightly less than 6.7 percent of the total blue-whale units taken during the 1959/60 pelagic whaling season. The Netherlands catch in the 1959/60 season was 1,037 out of the 15,512 blue-whale units taken by all nations. In the 1958/59 season, the catch was 965 out of the total of 14,300 units, or slightly over 6.7 percent. The Minister reported that the Netherlands whaling expedition operated during 1959/60 season for 121 days, as compared to 102 days fixed by the International Whaling Convention for member countries. The Netherlands and Norway were not parties to the Convention in 1959/60. (United States Embassy in The Hague, July 12, 1960.)



### **New Hebrides**

JAPANESE BASE TO EXPORT FROZEN TUNA TO FRANCE:

The Japanese trading company operating the tuna base in the New Hebrides in July

1960, recently applied to the Japanese Fisheries Agency to increase from 8 to 12 the number of tuna boats based at Espiritu Santo. That base has been exporting to the United State's about 3,500 tons of frozen tuna a year, and this year for the first time the French Government granted the right to export annually 1,000 tons of tuna (or tuna products) to France. (The New Hebrides is a British-French joint dominion, and the French Government has in the past prohibited the import of tuna from other than French territories.)

Since there is little probability that the 8 boats operating out of the base could fill the quota for export to France, the application for an increase in the fleet was made. If the increase is granted and the 1,000-ton quota is filled this year, it is considered possible that the quota may be increased in the near future. Already this year about 300 tons of tuna from the Espiritu Santo base has been shipped to France, where the price is the same as in Italy. (The Suisan Tsushin, July 21, 1960.)



### New Zealand

EXPORTS OF FISH-LIVER AND

WHALE OIL, 1959:

In 1959, New Zealand exported 272,655 Imperial gallons of marine-animal oils--97.2 percent whale oil and 2.8 percent fish-liver oils. The fish-liver oil exports accounted for 41 percent of the total value, however, due to their relatively higher value--US\$16.03 per

Type and Destination	Quantity	Value		
Fish Liver Oil: 1	Imperial Gallons	<u>LNZ</u>	US\$	
United Kingdom	4,602 3,161	33, 494 10, 888	93, 887	
Total	7,763	44, 382	124, 407	
Whale Oil: Australia Italy Netherlands	39,345 57,697 167,850	11, 393 12, 936 39, 613	31,930 36,261 111,039	
Total	264,892	63,942	179,230	
Grand Total	272,655	108, 324	303,643	

1/In containers of 1 gallon or over.
Note: Values computed at rate of one New Zealand pound equals
US\$2.8031.

Imperial gallon as compared with US\$0.68 a gallon for whale oil. (U. S. Foreign Agricultural Service Report, Wellington, April 22, 1960.)

\* \* \* \* \*

New Zealand (Contd.):

SWEDES ESTABLISH FACTORY FOR SPORT FISHING EQUIPMENT:

Negotiations between a Swedish manufacturer of sport-fishing equipment and a repsentative of a New Zealand firm for a jointly-owned factory in New Zealand have been completed, according to press reports from Sweden.

The Swedish company will establish a factory at Rotoura on the northern island of New Zealand for the manufacture of fishing rods, trolling spoons, and other sport fishing equipment. (U. S. Consul in Goteborg, Sweden, June 23, 1960.)



### Peru

FISH-MEAL INDUSTRY SEEKS TO LIMIT PRODUCTION AND EXPORTS:

A deepening crisis in the Peruvian fish-meal industry, due to overproduction, declining world demand, and prices which have fallen to a point generally considered to be below the cost of production in most if not all instances, has caused Peruvian fish-meal producers to try to find a mutually acceptable course of unified action to meet the present critical situation. Some elements of the industry have expressed doubt that these efforts will be successful, and it has been suggested that the Peruvian Government may have to take action to curtail fish-meal production if the industry is unable to do so. Other elements believe that the industry will tend to be somewhat chaotic for the next year, during which a substantial percentage of existing plants will be forced to close or to change ownership, but that eventually, through the operation of economic factors the situation will normalize and that, as a result, Peru will have a less spectacular but a sounder and stronger indus-

The Sociedad Nacional de Pesqueria (The National Fisheries Society), the trade association of the Peruvian fishery industry, has been endeavoring to help the fish-meal industry achieve stability through its sponsorship of efforts to counteract the present situation of overproduction and plummeting prices. Representatives of the Society have expressed the belief that the industry can achieve stability by fixing maximum production at 400,000 to 450,000 metric tons, a production quota which probably would give the Peruvian industry a fair and equitable share of the world market, and would permit prices to recover sufficiently to give producers a reasonable profit.

Under the auspices of the Society, meetings of representatives of the Peruvian fish-meal industry were held June 23 and June 30, 1960. The purpose of the meetings was twofold: To consider reports of committees which had been asked to recommend measures for limiting production and exports as a means of bringing stability to the Peruvian industry, and to consider a proposal that the Government of Peru be asked to suspend the issuance of licenses for new fish-meal plants while the problem of overproduction in Peru continues. (In that connection, it has been reported that the Ministry of Agriculture, Bureau of Fisheries and Hunting, has been withholding licenses for 12 new fish-meal plants.) The proposals were rejected by the large majority of those attending on the

ground that they were contrary to Peru's traditional policy of freedom of commerce and industry.

The proposal advanced for consideration at the first meeting was that the 74 existing fish-meal plants should be assigned production quotas. That assigned to each plant appears to have been its fullest possible production capacity. The total of the fixed quotas for the 74 plants was 1,021,400 tons. Plants in a second group, consisting of new plants without production history for 1959 or the first 4 months of 1960, including those under construction, were to be limited to 40 percent of their authorized capacity, as specified in their licenses. The proposal did not come to a vote because of the strong opposition voiced at the meeting. The proposal offered at the second meeting is understood to have involved the establishment of four categories of plants according to size, with the objective that the production capacity of each group would be reduced by a specified percentage agreeable to the plants in each group. It also proved to be unacceptable.

A new committee, whose members consist of representatives of large producers, of small producers, and of new plants which have received licenses to operate but which have not yet entered into production, has been asked to seek new means of coordinated action acceptable to the several groups involved. Among suggestions for measures to be considered are the establishment of closed seasons for anchovy fishing, which would automatically reduce production, and a request to the Government for exemption of the fish-meal industry from duties and taxes in order to reduce costs below the world price.

Following the first meeting, data appeared in the press which pointed up the seriousness of the existing problem of overproduction in the Peruvian fish-meal industry. consumption of fish-meal was estimated at 875,000 tons. whereas the export potential of world-producing countries (including Peru at 400,000 tons) was estimated at 1,070,000 tons, or nearly 200,000 more than world consumption. Moreover, Peru must not only compete on the bases of price and quality with other producing countries, including Chile, for the available markets, but it must meet European buyer resistance to offers of \$60 per ton, increased freight rates from Peruvian ports to Europe, and the threat of restrictions in United States, British, and other markets whose domestic producers are seeking limitations on imports of fish-meal from Peru. An especially serious consequence of the present situation was stated to be the substantial reduction in revenues to the Government from taxes on fish-meal exports, an important source of income during recent years for the national budget.

The only official statistics for fish meal yet available for 1960 are those for exports during the first quarter of the year. They show a total of 148,091 tons for the first three months, or a monthly average of about 49,000 tons. Other data based upon shipping manifests show total shipments for January through May of approximately 250,000 tons, or a monthly average exceeding 51,000 tons. It is of interest to note that more than 72 percent of the shipments for the five-month period went to countries in Europe, principally the Netherlands and Germany; 10 percent went to the United States. Projecting exports for the full year at the same rate, the 1960 export total would be about 612,000 tons, compared with 277,600 tons exported in 1959 and 105,777 tons exported in 1958. Production in the latter year, the latest for which actual production data are available, amounted to 126,900 tons. Considering that between 80 and 85 percent of Peru's fish-meal production has been exported, total production in 1959 may be estimated at about 335,000 tons, and that for 1960 (at January-May level of production) at about 725,000 tons.

It has been suggested that Peru's fish-meal production in 1960 could exceed a million tons, because of the number of new plants coming into production and the expansion of existing plant and fishing facilities. However, some industry experts believe that a more realistic production figure for the current year would be about half that amount. They cite the

### Peru (Contd.):

strike of anchovy fishermen in April and May, the seasonally lighter supply of anchovy for six months beginning in May, and above all the world price situation, as limiting factors for Peru's over-all fish-meal production in the current year. Since present world prices are below cost of production in Peru, it is considered likely that some plants may close for the time being. Those with sufficient financial backing can afford to wait out the crisis. Others may find themselves in stringent circumstances and be forced to remain closed permanently.

The consensus at present is that no solution of Peru's problem of overproduction through concerted action of Peruvian producers is in sight, due to the natural reluctance of producers or prospective producers to agree to curtail their output. The large established producers who understand the seriousness of the situation probably could find a mutually agreeable basis for limiting production in the circumstances. Newcomers to the industry, not appreciating the world situation and the menace to the entire Peruvian industry, including themselves, are concerned only with prompt returns on investments. In the end, some agreement on a production quota may be reached, but it probably would be a series of compromises without real value.

Some representatives of the industry have suggested that the world can use much more fish meal than it is willing to buy at present, and that the eventual solution of Peru's problem will come through wider use of the product. They believe such a trend could develop-possibly beginning in four months or so-when all fish meal sold under forward contracts at high prices has been absorbed, and all buyers have had the advantage of the moderate-priced product. They be-

lieve Peru can produce about half a million tons of fish meal a year and that the industry itself, emerging from the present crisis as a stronger and better developed segment of Peru's economy, will maintain that rate of production, according to the report dated July 7, 1960, from the United States Embassy in Lima.



### Portugal

CANNED FISH INDUSTRY, 1959:

In 1959, Portugal exported 76,986 metric tons of canned fish, valued at 1,142 million escudos (US\$39.7 million) as compared with 68,102 tons in 1958, valued at 1,035 million escudos (US\$35.9 million). Exports in 1959 were at a record high and were substantially higher than in 1958, another record year. The United States, one of Portugal's leading customers, purchased some 7,340 tons, valued at nearly US\$5 million, but not including a small amount shipped to United States Territories.

Considerable competition among Portuguese exporters resulted in lower export prices in 1959, despite higher production

Table 1	- Portuga	l's Expo	rts of Ca	nned Fis	h by Typ	e, and C	Country o	f Destin	ation, 19	591/		
Country	Sardines		Tuna		Anchovies		Mackerel		Other Fish		Total Canned Fish	
	Metric	US\$	Metric	US\$	Metric	US\$	Metric	US\$	Metric	US\$	Metric	US\$
	Tons	1,000	Tons	1,000	Tons	1,000	Tons	1,000	Tons	1,000	Tons	1,000
United States	3,368	2,144	1,027	728	2,707	1,951	40	20	198	124	7,340	4,96
United States Territories	51	24	-,02/	, 20	2,707	-,	_		60	42	111	6
Africa, British East	354	159	4	3	19	13	4	3	-	7.54	381	17
Africa, British West	1,380	619			3	2		_ ~	152	55	1,535	67
Africa, French Eq	351	160			1	1			28	11	380	17
Algiers	156	71			50	35			44	17	250	12
Australia	264	121	6	4	70	48			18	6	358	17
Austria	2,269	1,069	_ 0		117	82	37	18	85	32	2,508	1,20
Belgian Congo	798	363	21	16	10	7	51	25	406	150	1,286	56
Belgium-Luxembourg	3,905	1,843	103	73	90	63	913	464	15	6	5,026	2,44
Canada	295	165	6	4	183	127	32	17	5	1	521	31
	130	60	_ 0		18	12	2	1	161	41	311	11
	106	49			10		12	7	-		118	5
Czechoslovakia	338	153			2	2		_ '	2	1	342	15
7	3, 167	1,446	18	13	1,040	702	213	106	135	55	4,573	2,32
Germany	16,601	8,314	15	11	208	145	72	36	3	1	16, 899	8,50
Cl	2,313	1,075	13	11	2	1	-	_		_ ^	2,315	1,07
n	993	478	_		74	50	27	N.A.	1, 168	232	2,262	76
Holland	1,113	529	_	_	7	5	4	2	16	4	1, 140	54
Italy			2,241	1,572	995	887	1,562	783	958	377	10, 199	6,00
lordan	4,443	2,386	2,241	1,3/2	3	2	1,502	700	107	37	325	13
Kuwait	110	50	-	-	2	1	2	1	107	- 31	114	5
Lebanon	659	305	-		15	11	17	9	39	13	730	33
Liberia	69	32	1		15	11	17	2	70	25	139	5
	767	353	16	11	10	7	7	_	13	9	806	38
Overseas Portuguese Provinces	993	446	27	19	10	8			57	29	1,087	50
Philippings		894	41	19	2	1		9	360	312	2,411	1,20
Philippines	2,049	239	-	-	23	17	5		500	216	540	25
	517 388	180	-	-	3	2			158	58	549	24
			-	-	8	6	15	7	2	1	956	42
Sweden	931	408	70	- 50	253	178	172	89	14	2	1,831	1,01
Switzerland	1,320	700	72	50	చుం		1/2	0.5	7-9		353	15
Togoland & Fr. Cameroons .	353	157	10	- 7	54	37	- 2	- 1			180	9
Union of South Africa	114	53	10	7				1	5	- 1	7,688	3,58
United Kingdom	7,492	3,448	7	5	179	125	5 2	3	5	4	392	27
Venezuela	761	250	303	214	82 119	58 82	52	26	35	12	1.030	52
	764	359	60		6,359	4,668	3, 236	1.619	4,319	1,658	76,986	39,667
Total 1/Includes nations with shipmen	59,136		3,936	2,772				1,019	1,313	1,000	70,200	35,00

1/Includes nations with shipments of less than 100 tons or not individually identified. Note: Values converted at the rate of one Portuguese escudo equals US\$0.03472.

### Portugal (Contd.):

costs, especially for fillets of anchovies which were sold at the prewar price. By the end of the season, however, the prices for stocks on hand increased—this in turn caused prices to rise to a level which resulted in buyer resistance.

Actually the canned fish pack in 1959 was below that for 1958, and the record high exports were achieved by using the 1958 carryover stocks.

Exports of canned tuna to Italy suffered due to competition from Japanese and Scandinavian tuna which entered Italy duty free.

The drop in the 1959 pack was due principally to sardines—the 1959 landings were 16,000 tons less than in 1958. But mackerel and tuna landings also dropped in 1959. It was reported that the decline in the landings of sardines was not due to a natural scarcity but rather to the canners not buying to meet their needs because ex-vessel prices were considered too high.

	2 - Portugal's S 8-59, and 1959	ardine Landings, Utilization			
Item	Quantity	Value			
	Metric Tons	1,000 Escudos	US\$1,000		
Landings:					
1959	123, 314	341,628	11,820		
1958	139, 339	317,956	11,001		
Utilization, 1959:					
Canning	62, 204	180, 369	6,240		
Salting	1,053	1,923	67		
Fresh fish	60,057	159, 336	5,513		
Total	123, 314	341,628	11,820		

In addition, the industry was plagued by a low selling price for its pack. At one point the price was so low that French packers attempted to keep the Portugese product out of France. On the other hand, in the latter part of the year an extremely high price prevailed. Although the ex-vessel price for sardines in 1959 was higher than in 1958, the export price for canned sardines was much lower in 1959.

In 1959, sardine landings declined to 123,314 metric tons from 139,339 tons in 1958 (table 2). Of the amount landed in 1959, 62,204 tons were canned. (Conservas de Peixe, April 1960.)

Note: (1) Values converted at the rate of: 1958, 1 escudo equals US\$0.0346; 1959, 1 escudo equals US\$0.0347.

(2) Also see <u>Commercial Fisheries Review</u>, June 1960 p. 60.

\* \* \* \* \*

# CANNED FISH EXPORTS, FIRST QUARTER 1960:

Portugal's exports of canned fish during the first quarter of 1960 amounted to 16,684 metric tons, or 924,000 cases. Sardines comprised the bulk of the exports with 85.6 percent of the total, followed by anchovy fillets (7.2 percent).

Product	January-March					
Product	196		1959			
	Metric	1,000	Metric	1,000		
	Tons	Cases	Tons	Cases		
Sardines	14,287	752	13,052	672		
Chinchards	244	13	-	-		
Tuna and tunalike fish .	456	13	609	22		
Anchovy fillets	1,203	120	1,593	159		
Mackerel	58	3	1,361	55		
Others	436	23	403	29		
Total	16,684	924	17,018	937		

During January-March 1960, Portugal's most important canned fish buyers were Germany with 3,732 tons, followed by the United States with 2,114 tons, the United Kingdom with 2,025 tons, and Italy with 1,509 tons. The principal canned fish products imported by the United States were sardines (957 tons) and anchovy fillets (633 tons). (Conservas de Peixe, May 1960.)

#### \* \* \* \* \*

# CANNED FISH PACK, FIRST QUARTER 1960:

The total Portuguese pack of canned fish, in oil or sauce, for the first quarter of 1960 amounted to 4,392 metric tons, or 287,000 cases. Sardines accounted for 51.8 percent of the total pack. Anchovy fillets followed with 31.6 percent. (May 1960 Conservas de Peixe.)

Product	January-March					
	19	60	1959			
	Metric Tons	1,000 Cases	Metric Tons	1,000 Cases		
In oil or sauce: Tuna and tunalike fish	543	19	1,829	182		
Mackerel	11	1	4	-		
Sardines	2,277	120	1,907	100		
Anchovy fillets Others	1,387	138	203 340	7		
Total	4,392	287	4,287	306		

\* \* \* \* \*

# FISH CANNING INDUSTRY FAILS TO IMPROVE EXPORT PRACTICES:

The important Portuguese sardine canning industry in 1959 again failed to improve

### Portugal (Contd.):

inefficient export practices. Industry leaders and government officials have continued to point out that with about 250 canneries (includes 75 canneries with less than 21 workers) and over 2,000 brands of sardines, Portuguese sardine exports cannot be effectively advertised or marketed. This has been a disappointment to many in the industry who believe Portugal could improve her exports substantially through an agreed reduction of the number of export brands, the adoption of more standard packaging and, especially, an advertising campaign abroad similar to that carried out by Norwegian sardine canners, the United States Embassy in Lisbon stated in a June 21, 1960, dispatch.



### Singapore

### FISHERIES TRENDS, 1959:

Estimated commercial landings of fishery products in Singapore during 1959 amounted to about 11,300 metric tons. Total consumption (landings plus imports) in 1959 was estimated at about 38,900 tons. The number of fishing vessels licensed in 1959 included 1,904 without power, 639 vessels with outboard motors, and 154 vessels with inboard motors—a total of 2,697 craft.

There is very little processing of fish in Singapore. During periods of good catches some anchovies are boiled in brine and sold as boiled fish. The boiled-in-brine anchovies may also be sun-dried and sold locally as dried "billis." In addition, some red snappers are salt-cured. (United States Consulate, Singapore, report of June 23, 1960.)



### South-West Africa

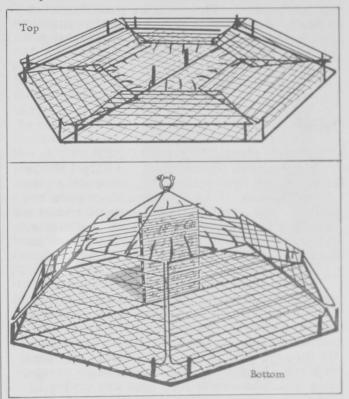
## NEW TYPE SPINY LOBSTER COLLAPSIBLE TRAP TESTED:

Research vessels of the South-West Africa Administration are conducting tests on a new type of spiny lobster trap which has been designed and developed in South-West Africa for use on the Union and South-West African coasts.

Although the final report on the traps is not yet available, the results of two tests already carried out were as follows:

- (1) One trap was lowered to the bottom for 30 minutes in 25 fathoms of water and in a thinly populated area. Upon hauling, it was found to contain 15 fairly large spiny lobsters.
- (2) Thirty spiny lobsters were caught and left submerged in the trap, for 15 hours. When the trap was hauled up the lobsters were still in the trap, although there was every indication that they were exhausted.

These results emphasize two of the claims made for the new traps, namely that they are successful in attracting spiny lobsters, and that once in the trap they have little chance of escape.



Top: Spiny lobster trap collapsed for storage.

Botton: Ready for use--trap is 42 inches across the base and when opened is 9 inches high. Bait basket in center is rectangular, although later models have a triangular bait basket so that it can be collapsed to form an integral part of the trap.

The trap is constructed in the form of a metal framework of truncated pyramid shape with a hexagonal base. The sides slope upwards and inwards to a long opening sufficiently large to allow the lobster to enter the trap. Inside the framework is a wire-mesh bait basket of triangular shape.

In use, the lobsters crawl up the side of the trap to reach the bait in the basket. They cannot take the bait without actually entering the trap, and, once they are inside, the possibility of escape is remote. South-West Africa (Contd.):

The trap measures 42 inches across the base and is 9 inches high. It weighs less than ten pounds and is estimated to hold between 40 and 50 average-size spiny lobsters. For storage purposes, the traps collapse to a thickness of one inch; enabling boats to carry large numbers in a limited space. It is expected that dinghies will be able to carry more than eight traps.

As the spiny lobster cannot remove bait from the traps, bait expenditure is expected to be considerably reduced. The traps have also been constructed so as not to hook on the sea bottom. They will be manufactured in South-West Africa under a Union patent. (South African Shipping News and Fishing Industry Review April 1960.)



### Spain

### LICENSES IMPORTS OF FROZEN TUNA:

The Spanish Government in July 1960 issued import licenses for 10,000 metric tons of frozen tuna. It is reported that there has been a flood of offers from various countries to sell frozen tuna, including some albacore at the low price of US\$180 (delivered in Spain).

The Japanese Government, noting that Spanish canned tuna in brine is at present competing with the Japanese product in the United States market, does not regard exports of frozen tuna to Spain as desirable. Up through July it had not licensed any such exports. However, Japanese trading companies which handle frozen tuna are trying to get Government approval, feeling that otherwise the Spanish market will be completely taken over by other countries. (The Suisan Tsushin, July 21, 1960.)

\* \* \* \* \*

FISHERIES TRENDS, APRIL-JUNE 1960: Fish Exchange: A total of 13,923 metric tons of fish were landed during the second quarter of 1960, as compared with 11,968 tons for the previous quarter and 15,165 tons for the second quarter of 1959.

Landings of the most important species during the second quarter of 1960 were: 754 metric tons of albacore (665 tons for the

second quarter of 1959); 1,694 tons of small hake (2,498 tons for the first quarter and 2,571 tons for the second quarter of 1959); and 2,457 tons of horse mackerel (1,198 tons for the first quarter and 1,927 tons for the second quarter of 1959). Second quarter 1960 sardine landings amounted to 1,482 tons (1,083 tons for the first quarter and 962 tons for the second quarter of 1959). Ex-vessel prices for sardines averaged 7.07 pesetas per kilo (5.3 U.S. cents a pound based on a rate of 60 pesetas to US\$1 in effect since July 18, 1959) as compared with 6.52 pesetas per kilo (7.0 U.S. cents a pound based on a rate of 42 pesetas to US\$1) in the same period of 1959.

The average price per kilo for all fish at the Exchange for the total catch during the second quarter of 1960 was 9.41 pesetas (7.1 U. S. cents a pound) as compared with 11.63 pesetas (8.8 U.S. cents a pound) in the first quarter of 1960 and 11.32 pesetas (12.2 U.S. cents a pound) in the second quarter of 1959.

Landings of large hake, which have a high ex-vessel value, increased in the second quarter of 1960 to 234 tons from 85 tons during the previous quarter, but were down sharply from the 538 tons landed in the first quarter of 1959. The average price per kilo for large hake during the quarter was 42.65 pesetas (32.2 U.S. cents a pound) as compared with 56.11 pesetas (42.4 U.S. cents a pound) for the previous quarter and 39.7 pesetas (42.9 U.S. cents a pound) for the first quarter of 1959.

Canning: With the lifting of the ban on sardine fishing in April 1960, and the initiation of the albacore season, canning activity in the Vigo area moved into full gear. Anticipation of another favorable export year has increased demand for both albacore and sardines both of which were in better supply than in the second quarter of 1959. Canners paid (based on peseta valuation) on the average about 44 percent more for albacore and about 7 percent more for sardines than in the second quarter of 1959.

The amount of fish purchased (2,469 tons) by the canners during the second quarter of 1960 exceeded that of the same period in 1959 by 812 tons, another indication of the industry's optimism as the new canning season got under way.

In addition to the higher costs paid for albacore and sardines, the canning industry is currently paying more for olive oil.

### Spain (Contd.):

While the problem of tinplate supplies, a perennial plague to the canning industry, was resolved by the liberalization of imports of this product, the new customs duties promulgated in June 1960 have raised the price of imports and threaten to raise the cost of nationally-manufactured tinplate. The new duty, which is 30 percent ad valorem plus an additional charge of 12 percent ad valorem, has raised the price of imports approximately 11 percent. A 195-pound box of imported tinplate (from Western Europe) which was previously 1,677.21 pesetas (\$27.95), now costs 1,856.70 pesetas (\$30.95). At the present time, because of the unavailability of machinery necessary for the initial lamination process, the national tinplate industry has not been able to supply the national market, and it is doubted that the higher duties on imported tinplate will in any way contribute to the solution of the national producers' problems. Canners are particularly resentful of the new duties because in their view they are pointless, and only serve to raise their production costs and offer protection to an industry which is not in a position to make use of it.

Exports: In spite of increased costs for olive oil and tinplate, Vigo fish canners anticipate another exceptional year, particularly in exports of canned albacore to the United States. Forecasts run as high as double 1959 export levels, which in turn were well above

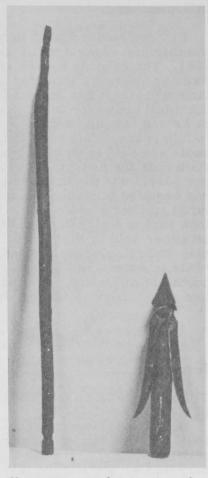
Product		1959	1958		
	Metric		Metric		
treated the National Street Co.	Tons	US\$	Tons	US\$	
Albacore in brine	1,335	1,050,407	203	168, 469	
Albacore in oil	15	13, 140	10	9,317	
Anchovies in oil	193	158,276	154	138,648	
Sardines	19	13, 475	6	4,056	
Other	18	16,086	9	9,357	
Total	1,580	1, 251, 384	382	329,847	

1958 exports. The actual level of exports will probably depend in large measure on the supply of fresh albacore available for canning. At the moment, the outlook is favorable. One factor, however, which helped boost 1959 exports, which is not present this year, was the surplus stocks unsold from the 1958 canning year, and which were exported in the summer of 1959 when the devaluation of the peseta stimulated the canned fish export boom. (United States Consulate report from Vigo, July 15, 1960.)

\* \* \* \* \*

### NORWEGIAN-TAGGED TUNA CAUGHT OFF SPANISH MOROCCO:

In June of 1960, a Spanish fishing boat caught a large tuna in the Atlantic off the coast of what was formerly Spanish Morocco, near Larache. When caught the tuna had a harpoon protruding from the dorsal fin area. A reference in Johannes Hamre's book "Annales Biologiques" indicates that the harpoon is of the type used by Norwegians in the summer of 1958 to tag 18 tuna in Norwegian waters. At the time of tagging the largest tuna weighed roughly 263 pounds. The tuna caught off Morocco weighed 397 pounds when



Norwegian tagging harpoon removed from tuna caught off Spanish Morocco.

landed. So over a two-year period a probable growth of at least 134 pounds took place.

--Francisco Vallecillo Pecino Ramon de Carranza Ceuta, Spain



#### Sweden

FEW VESSELS TO FISH HERRING OFF ICELAND IN 1960:

Only 11 Swedish fishing vessels from the Bohus area will take part this year in herring fishing off Iceland. This is a reduction by almost one-half of the number fishing that area in 1959. In 1948, about 80 Swedish fishing vessels (a record number) participated. Since then and up to several years ago the normal number was some 30 vessels. Most of the boats making the journey this year left

Sweden (Contd.):

port on July 18, and were expected back late in September.

Fishermen say that it is most uncertain whether any vessels will make the journey in 1961. The reasons for the sharp drop in Swedish vessels fishing for herring off Iceland are: (1) it has proved difficult to recruit full crews for the boats; and (2) Icelandic fishing has not been especially profitable in late years. This year the financial prospects are said to be poor because of the reduction in the price of herring by one crown per barrel and the firm freight market which has resulted in higher freight costs. Also, a large number of the vessels which formerly took part in Icelandic expeditions are said to be either sold or discarded. Swedish fishermen when fishing for Icelandic herring operate in waters 50-150 sea miles east or northeast of Iceland. (United States Consulate report from Goteborg, July 11, 1960.)



### Tunisia

TUNA INDUSTRY CONTINUES TO USE FOREIGN LABOR:

Despite the firm intention announced in 1959, by the Tunisian Government to use only local labor at the Sidi Daoud tuna cannery on Cap Bon and the takeover of the cannery by the Tunisian National Fisheries Office, certain skilled jobs traditionally performed by Portuguese women and Spanish seamen are still held by nationals of those countries.

The tuna fishing season in Tunisia runs from early May to early July. This season 19 Portuguese women were employed to pack tuna meat in cans, while 30 Tunisian women were being trained. The Portuguese labor will be eliminated as soon as possible, according to Tunisian officials.

Captains of fishing boats traditionally have been Spaniards who follow the tuna across North Africa, working for a series of canneries. This season, I Spanish captain and 7 other Spaniards were employed at Sidi Daoud. The Director of the National Fisheries Office said skills required by the tasks and the seasonal nature of the employment make it unlikely they will be replaced by Tunisians in the near future, the

United States Embassy in Tunis reported on July 7, 1960.



### Turkey

IKENDERUN FISHERY TRENDS, JUNE 1960:

An Austrian citizen who resides in the United States and who has been the leading figure in the Iskenderun (on eastern edge of Mediterranean) fishing industry for the past 6 or 7 years reports that the shrimp catch (September 1959-May 1960) was below normal, amounting to about 50 tons. Approximately 28 tons were exported to Syria and Lebanon and the remainder consumed in Turkey. There were no exports during the 1959/60 season to the United States due to price factors. The Austrian citizen explained that shrimp has been abundant in the United States, and the prices in New York have been too low. Turkish shrimp, although of excellent size and quality, cannot be sold profitably in the United States at less than 75 cents a pound. On the other hand, the demand in Syria and Lebanon has been strong and prices correspondingly high. As to the future, the Austrian citizen believes the prospects for shrimp exports to the United States may improve due to higher prices at New York. Egypt and Lebanon have recently signed a commercial agreement which grants Egyptian shrimp duty-free entry into Lebanon. The result has already been noted in reduced exports of Iskenderun shrimp to Beirut, Lebanon. Syria, particularly Aleppo, is now the main market for Iskenderun's fish products. This and other factors may favor the export of Iskenderun shrimp to the United States, but the volume will not exceed 5-10 tons and will in all probability be less, according to the Austrian citizen.

In June this year the Austrian was in Iskenderun awaiting the turtle season which this year has failed to materialize. Last year he slaughtered over 2,000 turtles and shipped the frozen meat to West Germany. This year, for reasons no one understands, there have been none. The eel catch from Amik Lake near Ankara has also been far below normal this year for equally mysterious reasons. The Austrian citizen is turning his attention to the development of yellow pike in Turkey. Last year he shipped a few sample packages of yellow pike fillets, caught in the lakes near Samsun and Izmir, to a number of places including Philadelphia and Buffalo. The results were excellent, and he believes the possibilities a bound to develop this fish in many areas of Turkey. He cites the lakes that have been created behind dams such as the Sevhan in Adana as excellent breeding grounds for yellow pike or carp. He says the program to develop fresh-water fish in Turkey would only require a little know-how and initiative and very little capital and cites his experience in developing the fish industry in Israel as supporting evidence. He is not optimistic that the Turks can or will supply any of these necessary ingredients.

The manager of the Iskenderun Meat and Fish Office confirms that there have been no recent shrimp exports to the United States and that the past season has been a poor one for the local fishing industry. He attributes this in part to the primitive methods and equipment used and the lack of any organized development program. The variation in the quantity of shrimp from year to year cannot be explained. The manager also mentioned a project to establish a canning plant for eels and turtle meat in Iskenderun, which he believes an American firm in conjunction with local fishing firms is considering. He thinks such a venture would be successful and would promote the local production of these items and possibly others. It could also be an important foreign-exchange earner. (United States Consulate in Iskenderun, Turkey, reported on June 24, 1960.)

### U. S. S. R.

POLAND AND EAST GERMANY EXPORT FISHING VESSELS TO SOVIET UNION:

Poland and East Germany have become important exporters of fishing craft to the Soviet Union. By the end of 1965 Poland is scheduled to deliver 19 vessels of the "Leskow" type, combination trawlers and factoryships of 1,250 tons, according to the June 7 issue of Vodnyj Transport.

During the last two years Poland has delivered 4 motherships and in 1960 will deliver 3 more of the same type. Each of these has the capacity to receive and process the catch of 4 trawlers.

East Germany delivers to the Soviet Union annually up to 75 medium trawlers with cold-storage facilities. At present East German shipyards are building vessels of the "Tropik" type which are designed to fish for sardines and tuna. A number of these vessels will be delivered next year. (Fiskets Gang, July 7, 1960.)



### **United Kingdom**

DIELECTRIC METHOD FOR THAWING FISH DEVELOPED:

The industrial thawing of frozen fish which normally takes up to 24 hours in air, can now be done in about 15 minutes by dielectric heating. This new development is the result of work at the Torry Research Station in Aberdeen, Scotland.

It is of economic importance, especially in view of the steadily increasing large-scale utilization of frozen fish.

The method, known as dielectric thawing, depends on the fact that if any material is placed between, but without touching, two metal plates which are charged with an alternating voltage of many thousands of volts at a frequency of about 40 million cycles per second, energy is produced in the material in the form of heat.

Under well defined conditions, fish may be uniformly thawed throughout a block of the frozen material—either as whole fish as in the case of herrings, or as fillets. It is possible to control conditions far more accurately than in existing methods, for ex-

ample, so that individual fish in a block may be separated while remaining partially frozen.

Laboratory-scale experiments at the Research Station have shown that it is possible to use dielectric heating successfully ontiny pieces of frozen fish. Pilot-scale apparatus, using slightly modified equipment which is commercially available, was therefore set up. Initially, the problem of "runaway heating" was encountered; small portions of blocks of fish absorbed the major part of the available energy and became cooked, while the rest of the block remained hard-frozen.

This problem has now been solved, and fish may be fed into the machine on an endless belt and thawed in 15 minutes.

The implications of this work are very wide. At present fish is thawed by laying it out in the air; it is sometimes, in addition, sprayed with water. Under these conditions, fish on the outside of a block thaws quickly and begins to deteriorate, while that in the middle remains frozen. Apart from possible deterioration, however, existing methods are slow, require much labor and factory space, and are unsuitable for fish factories with production lines.

The new method requires no handling during thawing, is quick, and therefore keeps deterioration to a minimum, and the equipment occupies only a few square yards of floor space.

The capital cost--about £10,000 (US\$28,000) for equipment to thaw one ton of fish per hour--is comparable to that for freezing equipment of similar capacity.

Running and depreciation costs appear to compare favorably with the costs of existing methods of thawing.

The potential results of this development, which is the subject of a patent application, are such that they could revolutionize certain sections of the fish handling and processing industry in a relatively short space of time. (Fishing News, July 8, 1960.)

\* \* \* \* \*

JAPANESE NEGOTIATE FOR PURCHASE OF WHALING FLEET:

A British whaling company announced on July 12, 1960, that conditional agreement United Kingdom (Contd.):

(subject to approval by the Japanese Government) had been reached with a Japanese whaling company for the sale of the British fleet consisting of the factoryship Balaena, the refrigerated vessel Enderby, and 7 whale catchers. The total book value of the British fleet as of July 31, 1959, was £1,711,858 (US\$4,793,000). Net proceeds from the sale are estimated to be about £2.5 million (US\$7 million).

Although the British firm gave no reason for disposing of their whaling fleet, it is believed to be due to dwindling profits from Antarctic whaling. The British firm had a net profit of £71,333 (\$200,000) in 1958, but showed a net loss of £490,471 (\$1,373,000) in 1959.

Additions to Japanese and Russian whaling fleets and a limited resource, plus declining world whale-oil prices may be contributing factors to the British firm's decision to dispose of its fleet. Whale oil that sold in London in 1950 for £127.10.0 (\$357) a long ton had dropped to £77.10.0 (\$217) in 1958 and sold for only £72.10.0 (\$203) a long

ton in 1959 and 1960. The Japanese, with a good market for whale meat, are not so dependent on the world price for whale oil in order to operate at a profit. (U. S. Embassy in London, July 14, 1960.)

\* \* \* \* \*

TRADERS DISTURBED THAT U. S. FISH MEAL DEMAND HAS DROPPED OFF:

United Kingdom traders in protein meals are disturbed by reports that the United States demand for fish meal this year would be less than a year ago. It is pointed out in Britain that fish meal prices have dropped some 40 percent since Christmas and that with Peru producing large quantities, only the United States can relieve the distressed market situation. Imports of fish meal have been increased by most European countries during the past six months, but demand is normally more unelastic in Europe than in the United States.

It is claimed that for the first time, animal protein meal is selling at less than vegetable meal. (United States Embassy, London, report of July 18.)



### MANATEE FOR AQUATIC VEGETATION CONTROL?

The Review, vol. 22, no. 4 (April 1960), on page 5, reported that the Food and Agriculture Organization and the Indo-Pacific Fisheries Council are exploring the possibility of introducing manatees (sea cows) into Ceylon and Thailand to control aquatic vegetation.

The Director of the Fisheries Division, FAO, wrote on August 23, 1960, that the report is substantially incorrect and misleading since neither FAO nor the IPFC are studying the practicability of such an introduction nor are they backing such a project.

The Director in his letter points out that the genesis of the statement may lie in the fact that a project for water-weed clearance in navigable waterways, including a study of several methods, including the use of "herbivorous water animals," was listed in the Report of the Inland Transport Committee (7th Session) to the Economic Commission for Asia and the Far East 14th Session, Malaya, 1958. The cooperation of TAA and/or FAO was to be sought.

Some information on the control of aquatic weeds (especially with 2, 4-D) and including the available data on manatees and nutria was sent to the Transport Division of ECAFE at its request by FAO's Regional Fisheries Officer in Bangkok. However, this constituted FAO's only contribution to the study.